

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:22:29 ON 24 APR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 APR 2009 HIGHEST RN 1138219-76-7

DICTIONARY FILE UPDATES: 22 APR 2009 HIGHEST RN 1138219-76-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

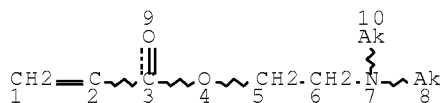
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> d que

L5 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

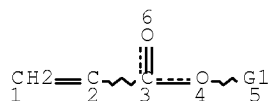
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L13 20368 SEA FILE=REGISTRY SSS FUL L5

L15 STR



VAR G1=T-BU/S-BU/I-BU/N-BU

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L17 3984 SEA FILE=REGISTRY SUB=L13 SSS FUL L15
 L18 4249 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L17
 L19 QUE SPE=ON ABB=ON PLU=ON FABRIC? OR TEXTIL? OR FIBER?
 OR FIBRE? OR FIBROUS?
 L20 1618 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L18(L)PREP/RL
 L21 114 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L19
 L23 271672 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON SURFACTANTS+PFT,NT
 /CT
 L24 245 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L23
 L25 QUE SPE=ON ABB=ON PLU=ON (BLOCK? OR GRAFT? OR STAR? O
 R BRANCH?) (5A)COPOLYMER?
 L26 17 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND L25
 L27 75 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND L25
 L28 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND ZWITTERIO
 N?
 L29 QUE SPE=ON ABB=ON PLU=ON ANTIWRINK? OR CREASEPROOF?
 OR CREASE PROOF? OR LAUNDER? OR CLEANSING? OR (HAIR? O
 R SKIN) (3A) (TREAT? OR PROTECT?)
 L30 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND L29
 L31 3 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND L29
 L32 13 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L29
 L33 29 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L26 OR L28 OR
 (L30 OR L31 OR L32)
 L35 13 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L33 AND (1840-2002
)/PRY,AY,PY
 L36 10 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND POLYMER?/S
 C,SX
 L37 37 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND POLYMER?/S
 C,SX
 L38 46 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 OR L37
 L39 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L38 AND (1840-2002
)/PRY,AY,PY
 L41 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 3637-26-1/RN
 L42 260 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 3637-26-1/CRN
 L43 96 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L41
 L44 299 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42
 L45 0 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L43 OR L44) AND
 L39
 L46 60 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L43 OR L44) AND
 L18
 L47 5 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 AND L19
 L48 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 AND L29
 L49 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L47 OR L48) AND
 (1840-2002)/PRY,AY,PY
 L50 49 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 OR L39 OR L45
 OR L49

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 09:22:35 ON 24 APR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Apr 2009 VOL 150 ISS 18
FILE LAST UPDATED: 23 Apr 2009 (20090423/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 150 1-49 ibib ed abs hitstr hitind

L50 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:430848 HCAPLUS Full-text
DOCUMENT NUMBER: 140:424122
TITLE: Controlled-structure copolymer comprising an amphoteric or zwitterionic part
INVENTOR(S): Destarac, Mathias
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004044023	A1	20040527	WO 2003-FR3255	20031031
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2846973	A1	20040514	FR 2002-13950	20021107
<--				
FR 2846973	B1	20041217		

10/534,196

FR 2859209	A1	20050304	FR 2003-10292	20030829
FR 2859209	B1	20071130		
AU 2003292304	A1	20040603	AU 2003-292304	20031031
			<--	
EP 1558658	A1	20050803	EP 2003-767870	20031031
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016048	A	20050913	BR 2003-16048	20031031
			<--	
JP 2006505686	T	20060216	JP 2005-506660	20031031
			<--	
US 20060217285	A1	20060928	US 2005-534196	20050506
			<--	
PRIORITY APPLN. INFO.:			FR 2002-13950	A 20021107
			<--	
			FR 2003-10292	A 20030829
			WO 2003-FR3255	W 20031031

ED Entered STN: 27 May 2004

AB The invention concerns a controlled structure polymer comprising at least two different parts: a first part A which is amphoteric or ~~zwitterionic~~, including anionic or potentially anionic units, and cationic or potentially cationic units, or ~~zwitterionic~~ units, and another part B which is not amphoteric or ~~zwitterionic~~. Said copolymer exhibits a high potential of adaptation, through variation of its composition, in order to improve the properties of compns. in which it is introduced. A typical copolymer was manufactured by radical polymerization of 65 g Bu acrylate in EtOH in the presence of O-ethyl-S-[1-(methoxycarbonyl)ethyl]xanthate at 70°, and radical polymerization of 173.4 g acrylic acid and 404.7 g 2-acryloyloxyethyltrimethylammonium Me sulfate in the presence of the resulting polymer in EtOH.

IT 691355-68-7P, Acrylic acid-2-acryloyloxyethyltrimethylammonium methyl sulfate-butyl acrylate block copolymer
(controlled-structure copolymer comprising an amphoteric or ~~zwitterionic~~ part)

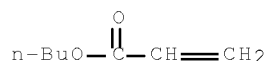
RN 691355-68-7 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

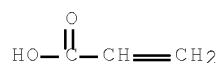
CMF C7 H12 O2



CM 2

CRN 79-10-7

CMF C3 H4 O2



CM 3

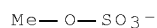
CRN 13106-44-0

CMF C8 H16 N O2 . C H3 O4 S

CM 4

CRN 21228-90-0

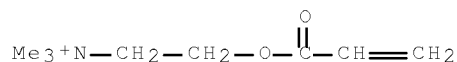
CMF C H3 O4 S



CM 5

CRN 20284-80-4

CMF C8 H16 N O2



- IC ICM C08F293-00
ICS C11D001-88; A61K007-075; C11D003-37; A61K007-02; A61K007-06
- CC 35-8 (Chemistry of Synthetic High Polymers)
- ST block copolymer amphoteric zwitterionic;
butyl acrylate acrylic acid acryloyloxyethyltrimethylammonium
methosulfate block copolymer manuf
- IT Polyelectrolytes
(amphoteric; controlled-structure copolymer comprising an
amphoteric or zwitterionic part)
- IT Hair preparations
(conditioners; controlled-structure copolymer comprising an
amphoteric or zwitterionic part for hair conditioners)
- IT Cosmetics
(conditioners; controlled-structure copolymer comprising an
amphoteric or zwitterionic part for skin conditioners)
- IT Detergents
(controlled-structure copolymer comprising an amphoteric or
zwitterionic part for detergents)
- IT Quaternary ammonium compounds, preparation
(polymers; controlled-structure copolymer comprising an amphoteric
or zwitterionic part)
- IT Zwitterions
(polymers; controlled-structure copolymer comprising an amphoteric

or zwitterionic part for hair conditioners)

IT Polymerization
(radical; of unsatd. monomers for manufacture of controlled-structure copolymer comprising an amphoteric or zwitterionic part)

IT 691355-68-7P, Acrylic acid-2-acryloyloxyethyltrimethylammonium methyl sulfate-butyl acrylate block copolymer
(controlled-structure copolymer comprising an amphoteric or zwitterionic part)

IT 9003-49-0P, Polybutyl acrylate
(copolymer precursor; controlled-structure copolymer comprising an amphoteric or zwitterionic part)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:390970 HCAPLUS Full-text

DOCUMENT NUMBER: 140:408665

TITLE: Antiwrinkling composition comprising a controlled-architecture copolymer for treatment of textile articles after laundering

INVENTOR(S): Harrison, Ian; Destarac, Mathias; Geffroy, Cedric

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: Fr. Demande, 36 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2846973	A1	20040514	FR 2002-13950	20021107
			<--	
FR 2846973	B1	20041217		
WO 2004044114	A1	20040527	WO 2003-FR3183	20031027
			<--	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003285465	A1	20040603	AU 2003-285465	20031027
			<--	
EP 1558720	A1	20050803	EP 2003-778466	20031027
			<--	
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006505709	T	20060216	JP 2004-551082	20031027
			<--	
JP 4177332	B2	20081105		
WO 2004044023	A1	20040527	WO 2003-FR3255	20031031
			<--	

10/534,196

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

AU 2003292304 A1 20040603 AU 2003-292304 20031031

<--

EP 1558658 A1 20050803 EP 2003-767870 20031031

<--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
BR 2003016048 A 20050913 BR 2003-16048 20031031

<--

CN 1735636 A 20060215 CN 2003-80108414 20031031

<--

JP 2006505686 T 20060216 JP 2005-506660 20031031

<--

US 20060217285 A1 20060928 US 2005-534196 20050506

<--

US 20070094809 A1 20070503 US 2006-534197 20060413

<--

US 7378033 B2 20080527

PRIORITY APPLN. INFO.:

FR 2002-13950 A 20021107

<--

FR 2003-10292 A 20030829

WO 2003-FR3183 W 20031027

WO 2003-FR3255 W 20031031

ED Entered STN: 14 May 2004

AB Antiwrinkling agents for treatment of ~~textile~~ articles after ~~laundering~~ are based on aqueous or aqueous alc. compns. containing a cationic surfactant and a polymer having (A) ≥ 1 nonionic hydrophobic block and (B) ≥ 1 ionic or ionizable block [B/A = (0.01-0.1):1] that is compatible with the cationic surfactant at the pH of mixing and utilization. A typical ~~block copolymer~~ was manufactured by radical polymerization of Bu acrylate in the presence of O-ethyl-S-[1-(methoxycarbonyl)ethyl] xanthate, and radical polymerization of 2-dimethylaminoethyl acrylate in the presence of the resulting poly(Bu acrylate).

IT 281198-01-4P, Butyl acrylate-2-dimethylaminoethyl acrylate
block copolymer 363619-87-8P
688811-07-6P

(antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
~~textile~~ articles after ~~laundering~~)

RN 281198-01-4 HCAPLUS

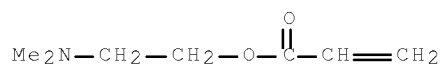
CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2439-35-2

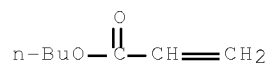
10/534,196

CMF C7 H13 N O2



CM 2

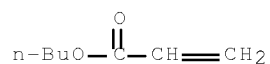
CRN 141-32-2
CMF C7 H12 O2



RN 363619-87-8 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

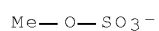


CM 2

CRN 13106-44-0
CMF C8 H16 N O2 . C H3 O4 S

CM 3

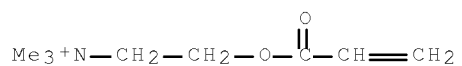
CRN 21228-90-0
CMF C H3 O4 S



CM 4

CRN 20284-80-4

CMF C8 H16 N O2



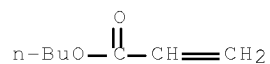
RN 688811-07-6 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

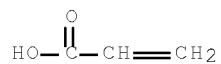
CMF C7 H12 O2



CM 2

CRN 79-10-7

CMF C3 H4 O2



CM 3

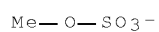
CRN 13106-44-0

CMF C8 H16 N O2 . C H3 O4 S

CM 4

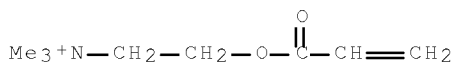
CRN 21228-90-0

CMF C H3 O4 S



CM 5

CRN 20284-80-4
CMF C8 H16 N O2



IC ICM C11D003-37
ICS C08F293-00; C11D001-38

CC 46-5 (Surface Active Agents and Detergents)

ST antiwrinkling agent cationic surfactant hydrophobic ionic
combination block copolymer; textile
laundering antiwrinkling agent; butyl acrylate
dimethylaminoethyl acrylate block copolymer
antiwrinkling agent

IT Creaseproofing
(agents; antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
textile articles after laundering)

IT Laundering
(antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
textile articles after laundering)

IT Surfactants
(cationic; antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
textile articles after laundering)

IT Quaternary ammonium compounds, uses
(dimethylditalow alkyl, chlorides; antiwrinkling compns.
containing a polymers having hydrophobic blocks and ionic/ionizable
blocks for treatment of textile articles after
laundering)

IT Quaternary ammonium compounds, uses
(polymers; antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
textile articles after laundering)

IT 281198-01-4P, Butyl acrylate-2-dimethylaminoethyl acrylate
block copolymer 363619-87-8P
688811-07-6P
(antiwrinkling compns. containing a polymers having
hydrophobic blocks and ionic/ionizable blocks for treatment of
textile articles after laundering)

IT 9003-49-0P, Polybutyl acrylate 33114-26-0P
(block polymer precursor; antiwrinkling compns. containing a
polymers having hydrophobic blocks and ionic/ionizable blocks for
treatment of textile articles after laundering)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:269902 HCAPLUS Full-text

DOCUMENT NUMBER: 140:287869

TITLE: Ion triggerable, cationic polymers, their
manufacture and use in wipe items

INVENTOR(S): Bunyard, W. Clayton; Branham, Kelly D.; Lostocco,
Michael R.; Calhoun, Glenn; Weston, Rod; Lang,

10/534,196

PATENT ASSIGNEE(S): Frederick J.; Possell, Kevin
 SOURCE: Kimberly-Clark Worldwide, Inc., USA
 U.S. Pat. Appl. Publ., 36 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040063888	A1	20040401	US 2002-251656	20020920
			<--	
US 7141519	B2	20061128		
WO 2004026958	A1	20040401	WO 2003-US16512	20030523
			<--	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW,			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003228262	A1	20040408	AU 2003-228262	20030523
			<--	
EP 1539880	A1	20050615	EP 2003-726961	20030523
			<--	
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003014099	A	20050621	BR 2003-14099	20030523
			<--	
MX 2005002501	A	20050527	MX 2005-2501	20050304
			<--	
PRIORITY APPLN. INFO.:			US 2002-251656	A 20020920
			<--	
			WO 2003-US16512	W 20030523

ED Entered STN: 02 Apr 2004

AB The title binder copolymers having ammonium groups are applied to fiber-containing fabrics and webs for personal care products, such as wet wipes. A cationic polymer binder was prepared from 39.6 g Adamquat MC-80 and 2267.7 g Me acrylate in acetone in the presence of Vazo 52.

IT 36347-54-3F, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate 113673-28-2F, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate (ion triggerable cationic polymers for wet wipes)

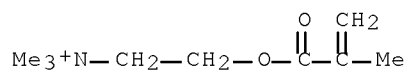
RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 5039-78-1

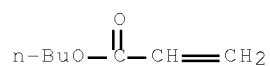
CMF C9 H18 N O2 . C1



CM 2

CRN 141-32-2

CMF C7 H12 O2



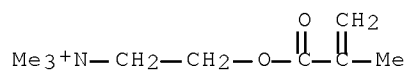
RN 113673-28-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, polymer with butyl 2-propenoate and methyl 2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

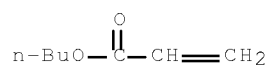
CMF C9 H18 N O2 . Cl



CM 2

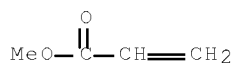
CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 96-33-3
CMF C4 H6 O2



IC ICM C08F012-28
INCL 526310000
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 43, 62
IT Polyolefin ~~fibers~~
(ethylene; ion triggerable cationic polymers for wet wipes)
IT Wood
(~~fibers~~; ion triggerable cationic polymers for wet wipes)
IT Binders
Cellulose pulp
Cosmetics
Nonwoven ~~fabrics~~
Wipes
(ion triggerable cationic polymers for wet wipes)
IT Polyester ~~fibers~~, uses
(ion triggerable cationic polymers for wet wipes)
IT 36347-54-3P, Ethanaminium,
N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer
with butyl 2-propenoate 113673-28-2P, Ethanaminium,
N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer
with butyl 2-propenoate and methyl 2-propenoate 116076-06-3P,
Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, polymer with methyl 2-propenoate 220557-78-8P,
Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride.
polymer with methyl 2-propenoate 673496-25-8P 673496-26-9P
673496-28-1P
(ion triggerable cationic polymers for wet wipes)
REFERENCE COUNT: 199 THERE ARE 199 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:252158 HCAPLUS Full-text
DOCUMENT NUMBER: 140:292223
TITLE: Ion triggerable cationic polymers for wet wipes
INVENTOR(S): Branham, Kelly D.; Bunyard, W. Clayton; Lang,
Frederick J.; Possell, Kevin; Lostocco, Michael R.
PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 34 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040058606	A1	20040325	US 2002-251610	20020920

<--

US 7157389	B2	20070102		
WO 2004026354	A1	20040401	WO 2003-US28244	20030908
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003266008	A1	20040408	AU 2003-266008	20030908
<--				
AU 2003266008	B2	20080703		
EP 1539259	A1	20050615	EP 2003-797891	20030908
<--				
EP 1539259	B1	20070725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014054	A	20050705	BR 2003-14054	20030908
<--				
CN 1681539	A	20051012	CN 2003-821232	20030908
<--				
CN 100382853	C	20080423		
JP 2006500101	T	20060105	JP 2004-537751	20030908
<--				
ZA 2005001927	A	20060531	ZA 2005-1927	20050101
<--				
MX 2005002432	A	20050816	MX 2005-2432	20050303
<--				
US 20070010155	A1	20070111	US 2006-520169	20060912
<--				
US 7456117	B2	20081125		
PRIORITY APPLN. INFO.:				
			US 2002-251610	A 20020920
<--				
			WO 2003-US28244	W 20030908

ED Entered STN: 26 Mar 2004

AB The present invention is directed to ion triggerable, water-dispersible cationic polymers. The present invention is also directed to a method of making ion triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to fiber-containing fabrics and webs comprising ion triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. A cationic polymer binder was prep'd from Adamquat MC-80 and Me acrylate.

IT 36347-54-3P, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate 113673-28-2P, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate (ion triggerable cationic polymers for wet wipes)

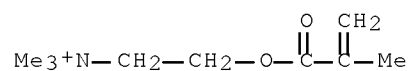
RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 5039-78-1

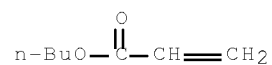
CMF C9 H18 N O2 . Cl



CM 2

CRN 141-32-2

CMF C7 H12 O2



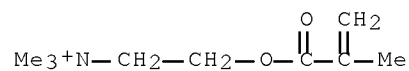
RN 113673-28-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, polymer with butyl 2-propenoate and methyl 2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

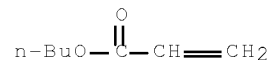
CMF C9 H18 N O2 . Cl



CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 96-33-3

CMF C4 H6 O2



IC ICM B32B005-02

INCL 442327000

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 35, 38, 63

IT 36347-54-3P, Ethanaminium,
 N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer
 with butyl 2-propenoate 113673-28-2P, Ethanaminium,
 N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer
 with butyl 2-propenoate and methyl 2-propenoate 116076-06-3P,
 Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
 chloride, polymer with methyl 2-propenoate 220557-78-8P,
 Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride.
 polymer with methyl 2-propenoate 673496-25-8P 673496-26-9P
 673496-28-1P

(ion triggerable cationic polymers for wet wipes)

REFERENCE COUNT: 199 THERE ARE 199 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L50 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:250691 HCAPLUS Full-text

DOCUMENT NUMBER: 140:276247

TITLE: Water-dispersible personal care products
 containing ion-triggerable cationic polymers as
 binders

INVENTOR(S): Bunyard, W. Clayton; Branham, Kelly D.; Lostocco,
 Michael R.; Lang, Frederick J.; Possell, Kevin

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 20040055704	A1	20040325	US 2002-251692	20020920
			<--	
US 7101456	B2	20060905		
WO 2004026352	A1	20040401	WO 2003-US16513	20030523
			<--	

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,

10/534,196

LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
 TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

AU 2003233689 A1 20040408 AU 2003-233689 20030523
 <--
 MX 2005002397 A 20050527 MX 2005-2397 20050302
 <--
 PRIORITY APPLN. INFO.: US 2002-251692 A 20020920
 <--
 WO 2003-US16513 W 20030523

ED Entered STN: 26 Mar 2004

AB The present invention is directed to water-dispersible cationic polymers whose tensile strength is ion-concentration sensitive, or called ion-triggerable hereafter. The present invention is also directed to a method of making ion triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to fiber-containing fabrics and webs comprising ion triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. For example, a wet handsheet was made from air-laid nonwoven fabric as the basesheet, the copolymer of acryloyloxyethyl tri-Me ammonium chloride and Me acrylate as the binder, and sodium chloride as the ion trigger.

IT 36347-54-3P, Butyl acrylate-2-Methacryloyloxyethyl trimethyl ammonium chloride copolymer 113673-28-2P
 (preparation of cationic acrylic polymers as binders for water-dispersible wet wipes)

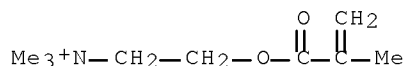
RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . Cl

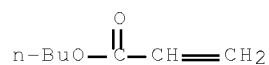


● Cl⁻

CM 2

CRN 141-32-2

CMF C7 H12 O2



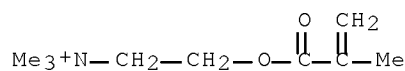
RN 113673-28-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

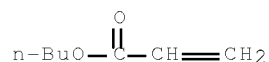
CMF C9 H18 N O2 . Cl



CM 2

CRN 141-32-2

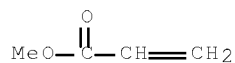
CMF C7 H12 O2



CM 3

CRN 96-33-3

CMF C4 H6 O2



IC ICM B32B031-00

INCL 156305000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 35, 46, 62

ST water dispersible personal care cationic polyacrylate binder; cationic polyacrylate binder nonwoven fabric sodium chloride trigger handsheet

IT Nonwoven fabrics
(cationic acrylic polymers as binders for nonwoven fabrics
used in water-dispersible wet wipes)

IT Cosmetics
(cleansing, handsheets; cationic acrylic polymers as
binders for water-dispersible wet handsheets)

IT Fibrous materials
(water-dispersible wet wipes containing fibrous materials
bound by cationic acrylic polymers)

IT Medical goods
(wipes, baby wipes; water-dispersible wet wipes containing
fibrous materials bound by cationic acrylic polymers)

IT 36347-54-3P, Butyl acrylate-2-Methacryloyloxyethyl trimethyl
ammonium chloride copolymer 113673-28-2P 116076-06-3P
220557-78-8P, 2-Acryloyloxyethyl trimethyl ammonium chloride-methyl
acrylate copolymer 673496-25-8P 673496-26-9P 673496-27-0P
673496-28-1P
(preparation of cationic acrylic polymers as binders for
water-dispersible wet wipes)

REFERENCE COUNT: 200 THERE ARE 200 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:157447 HCAPLUS Full-text
DOCUMENT NUMBER: 140:201103
TITLE: Use of gradient copolymers as dispersing agent for
the treatment of pigments and solids
INVENTOR(S): Goebelt, Bernd; Haubennestel, Karlheinz; Krappe,
Udo; Della Valentina, Petra
PATENT ASSIGNEE(S): BYK-Chemie G.m.b.H., Germany
SOURCE: Ger. Offen., 17 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 10236133	A1	20040226	DE 2002-10236133	20020807
			<--	
TW 592794	B	20040621	TW 2003-92119040	20030711
			<--	
CA 2435516	A1	20040207	CA 2003-2435516	20030718
			<--	
EP 1416019	A1	20040506	EP 2003-17316	20030731
			<--	
EP 1416019	B1	20050518		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 295871	T	20050615	AT 2003-17316	20030731
			<--	
ES 2240896	T3	20051016	ES 2003-17316	20030731
			<--	
KR 2004014311	A	20040214	KR 2003-54423	20030806
			<--	
JP 2004066235	A	20040304	JP 2003-287916	20030806
			<--	
CN 1495204	A	20040512	CN 2003-158622	20030807

10/534,196

<--

CN 1310975	C 20070418	
US 20040143035	A1 20040722	US 2003-636319 20030807

<--

PRIORITY APPLN. INFO.: DE 2002-10236133 A 20020807

<--

ED Entered STN: 26 Feb 2004

AB Copolymers are manufactured by continuously living, controlled polymerization of ethylenically unsatd. compds. in the presence of nonpolymeric monofunctional initiators in such a way that the products exhibit a gradual hydrophilicity to hydrophobicity along the chains. These copolymers are post-treated to give dispersing agents for pigments in coatings and fillers in plastics,. A typical dispersant was manufactured by heating 3.3 mL benzenesulfonyl chloride, 103 g Bu methacrylate, 1 g 2,2'-bipyridine and 400 mg Cu powder in 25 mL methoxypropyl acetate (I) to 100°, adding 65 g N,N'-dimethylaminoethyl methacrylate at 0.8 mL/min, heating 5 min at 100° heating 168 g polymer 2 h at 100° with 52 g benzyl chloride in 150 g each I and ethylene glycol mono-Bu ether until the reaction was complete.

IT 24938-16-7P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer 26658-83-3P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate copolymer 143363-32-0P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer (dispersant precursor; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

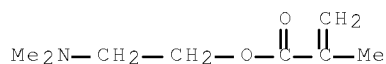
RN 24938-16-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

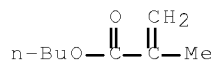
CMF C8 H15 N O2



CM 2

CRN 97-88-1

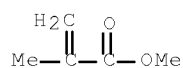
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



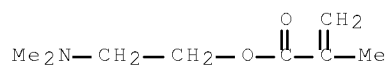
RN 26658-83-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

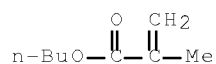
CMF C8 H15 N O2



CM 2

CRN 97-88-1

CMF C8 H14 O2



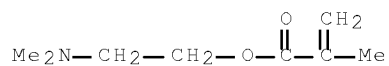
RN 143363-32-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

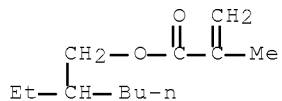
CMF C8 H15 N O2



CM 2

CRN 688-84-6

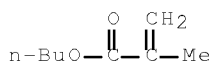
CMF C12 H22 O2



CM 3

CRN 97-88-1

CMF C8 H14 O2



IT 146267-18-7P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate copolymer benzyl chloride salt 661478-15-5P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer benzyl chloride salt 661478-16-6P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer benzyl chloride salt
(dispersant; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

RN 146267-18-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-44-7

CMF C7 H7 Cl



CM 2

CRN 26658-83-3

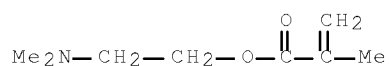
CMF (C8 H15 N O2 . C8 H14 O2)x

CCI PMS

CM 3

CRN 2867-47-2

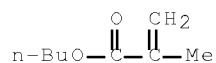
CMF C8 H15 N O2



CM 4

CRN 97-88-1

CMF C8 H14 O2



RN 661478-15-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (CA INDEX
 NAME)

CM 1

CRN 100-44-7

CMF C7 H7 Cl



CM 2

CRN 24938-16-7

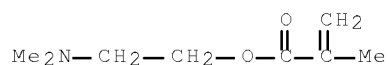
CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x

CCI PMS

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

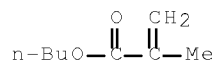


10/534,196

CM 4

CRN 97-88-1

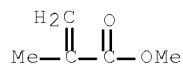
CMF C8 H14 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



RN 661478-16-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl
2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA
INDEX NAME)

CM 1

CRN 100-44-7

CMF C7 H7 Cl



CM 2

CRN 143363-32-0

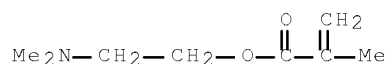
CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2)x

CCI PMS

CM 3

CRN 2867-47-2

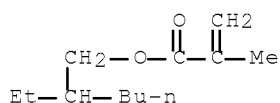
CMF C8 H15 N O2



CM 4

CRN 688-84-6

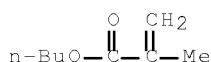
CMF C12 H22 O2



CM 5

CRN 97-88-1

CMF C8 H14 O2



IC ICM B01F017-52

CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35, 37

IT Coating materials

Dispersing agents

Fillers

Pastes

Pigments, nonbiological

(use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

IT 24938-16-7P, Butyl methacrylate-N,N-dimethylaminoethyl

methacrylate-methyl methacrylate copolymer 25702-92-5P, Butyl

methacrylate-2-hydroxyethyl methacrylate copolymer 25951-87-5P,

Butyl methacrylate-glycidyl methacrylate copolymer 26658-83-3P

, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate copolymer

28549-52-2P, Butyl methacrylate-tert-butyl methacrylate copolymer

143363-32-0P, Butyl methacrylate-N,N-dimethylaminoethyl

methacrylate-2-ethylhexyl methacrylate copolymer 661478-14-4P, Butyl

methacrylate-1-(2-methacryloyloxyethyl)-2-imidazolidinone methacrylate copolymer

(dispersant precursor; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

IT 25702-92-5DP, Butyl methacrylate-2-hydroxyethyl methacrylate

copolymer, esters with polyphosphoric acids 28549-52-2DP, Butyl

methacrylate-tert-butyl methacrylate copolymer, hydrolyzed

146267-18-7P, Butyl methacrylate-N,N-dimethylaminoethyl

methacrylate copolymer benzyl chloride salt 661478-15-5P,

Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-methyl

10/534,196

methacrylate copolymer benzyl chloride salt 661478-16-6P,
Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-2-ethylhexyl
methacrylate copolymer benzyl chloride salt 663152-70-3P, Butyl
methacrylate-glycidyl methacrylate copolymer p-nitrobenzoate
(dispersant; use of copolymers with hydrophilicity-hydrophobicity
gradient along chains as dispersing agents for pigments and
fillers)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:734373 HCAPLUS Full-text

DOCUMENT NUMBER: 140:375580

TITLE: Photopolymerized and photografted porous polymer
monoliths for fabrication of
microfluidic analytical systems

AUTHOR(S): Svec, Frantisek; Frechet, Jean M. J.; Hilder,
Emily F.; Peterson, Dominic S.; Rohr, Thomas

CORPORATE SOURCE: University of California, Berkeley, CA,
94720-1460, USA

SOURCE: Micro Total Analysis Systems 2002, Proceedings of
the μ TAS 2002 Symposium, 6th, Nara, Japan, Nov.
3-7, 2002 (2002), Volume 1, 332-334.
Editor(s): Baba, Yoshinobu; Shoji, Shuichi; Van
den Berg, Albert. Kluwer Academic Publishers:
Dordrecht, Neth.

CODEN: 69EMKZ; ISBN: 1-4020-1011-7

DOCUMENT TYPE: Conference

LANGUAGE: English

ED Entered STN: 19 Sep 2003

AB Two building blocks required for the construction of complex microfluidic
systems, an enzymic reactor and a separation unit, were designed, prepared,
and evaluated. These elements consisting of porous polymer monoliths were
prepared in situ via a UV initiated polymerization of a monolithic material
followed by photoinitiated grafting of polymer chains involving desired
functionalities. The function of the monolithic reactor was demonstrated with
digestion of a variety of proteins using immobilized trypsin. Extremely
efficient electrochromatog. separation of proteins was achieved at elevated
temperature in isocratic mode.

IT 684233-29-2, Butyl methacrylate-N,N-dimethyl-N-
methacryloyloxyethyl-N-(3-sulfopropyl)ammonium betaine-ethylene
dimethacrylate graft copolymer
(photopolymerized and photografted porous unsatd. polymer monoliths for
lining the channels of components of microfluidic anal. systems)

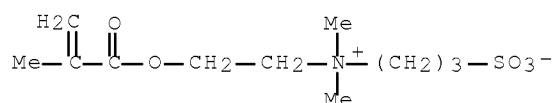
RN 684233-29-2 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-
propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with butyl
2-methyl-2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate),
graft (9CI) (CA INDEX NAME)

CM 1

CRN 3637-26-1

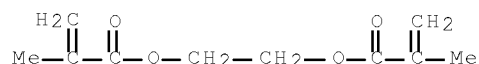
CMF C11 H21 N O5 S



CM 2

CRN 97-90-5

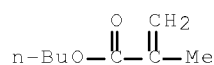
CMF C10 H14 O4



CM 3

CRN 97-88-1

CMF C8 H14 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 34, 80

IT 684233-29-2, Butyl methacrylate-N,N-dimethyl-N-methacryloyloxyethyl-N-(3-sulfopropyl)ammonium betaine-ethylene dimethacrylate graft copolymer

(photopolymd. and photografted porous unsatd. polymer monoliths for lining the channels of components of microfluidic anal. systems)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:591047 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 139:150723

TITLE: Film-forming antimicrobial compositions for tissue and skin antiseptics used in topical pharmaceutical products and cosmetics

INVENTOR(S): Wang, Danli; Scholz, Matthew T.; Zhu, Dong-wei; Lu, Triet M.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003061721	A1	20030731	WO 2002-US38951	20021205
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20030194415	A1	20031016	US 2002-52158	20020116
<--				
US 6838078	B2	20050104		
CA 2473841	A1	20030731	CA 2002-2473841	20021205
<--				
EP 1465676	A1	20041013	EP 2002-792331	20021205
<--				
EP 1465676	B1	20070815		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015518	A	20041221	BR 2002-15518	20021205
<--				
JP 2005520812	T	20050714	JP 2003-561661	20021205
<--				
AT 369881	T	20070915	AT 2002-792331	20021205
<--				
EP 1849487	A2	20071031	EP 2007-113625	20021205
<--				
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, SI, SK, TR				
ES 2290351	T3	20080216	ES 2002-792331	20021205
<--				
AU 2002357790	B2	20080306	AU 2002-357790	20021205
<--				
MX 2004006839	A	20041206	MX 2004-6839	20040714
<--				
NO 2004003297	A	20041007	NO 2004-3297	20040806
<--				
US 20050025794	A1	20050203	US 2004-922262	20040819
<--				
US 7323163	B2	20080129		
PRIORITY APPLN. INFO.:				
			US 2002-52158	A 20020116
<--				
			EP 2002-792331	A3 20021205
<--				
			WO 2002-US38951	W 20021205
<--				

ED Entered STN: 01 Aug 2003

AB The title compns. comprise: (A) a water-soluble or water-dispersible vinyl polymer having amine group on side-chains, and a copolymer of hydrophobic monomer; (B) water, (C) a surfactant, and (D) an active agent selected from antimicrobial agent, a pharmaceutical or a cosmetic agent. Thus, polymerizing 2-ethylhexyl acrylate with Ageflex FA 1Q80M (acryloyloxyethyltrimethylammonium

10/534,196

chloride) and AM 90G (polyethylene glycol Me ether acrylate) in ratio of 75/20/5 gave an A, 5% of which was mixed with 7.5% Povidone-iodine USP (antimicrobial agent), 5% Polystep B 22 (surfactant), 3.3% ethano, 6% lactic acid and balance water to give a tittle composition (pH 3.5-4) showing good human skin antimicrobial activity result.

IT 568592-95-0P 569676-28-4P

(preps. of water-soluble polymer in film-forming antimicrobial compns. for tissue and skin antiseptis)

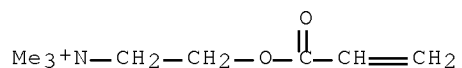
RN 568592-95-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

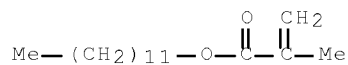
CMF C8 H16 N O2 . Cl



CM 2

CRN 142-90-5

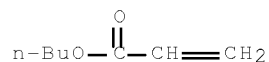
CMF C16 H30 O2



CM 3

CRN 141-32-2

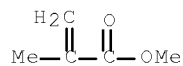
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



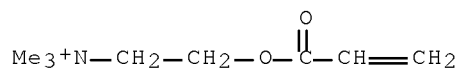
RN 569676-28-4 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with dodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

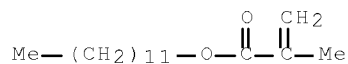
CMF C8 H16 N O2 . Cl



CM 2

CRN 142-90-5

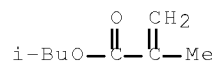
CMF C16 H30 O2



CM 3

CRN 97-86-9

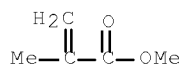
CMF C8 H14 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM A61L026-00
ICS A61K009-70; A01N033-12
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 10, 62, 63
IT **Surfactants**
(amphoteric; in film-forming antimicrobial compns. for tissue and skin antiseptis used in topical pharmaceutical products and cosmetics)
IT **Surfactants**
(anionic; in film-forming antimicrobial compns. for tissue and skin antiseptis used in topical pharmaceutical products and cosmetics)
IT **Cosmetics**
(cleansing; film-forming antimicrobial compns. for tissue and skin antiseptis used in topical pharmaceutical products and cosmetics)
IT **Surfactants**
(nonionic; in film-forming antimicrobial compns. for tissue and skin antiseptis used in topical pharmaceutical products and cosmetics)
IT 568592-93-8P, Ageflex FA 1Q80MC-AM 90G-2-ethylhexyl acrylate graft copolymer 568592-95-0P
569676-28-4P
(preps. of water-soluble polymer in film-forming antimicrobial compns. for tissue and skin antiseptis)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:508534 HCAPLUS Full-text
DOCUMENT NUMBER: 139:69673
TITLE: Manufacture of nitrogen-containing copolymers with narrow particle size distribution by suspension polymerization
INVENTOR(S): Konami, Yukichi; Nakagawa, Takeshi
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2003183310	A	20030703	JP 2001-387282	20011220
			<--	
PRIORITY APPLN. INFO.:			JP 2001-387282	20011220
			<--	

ED Entered STN: 03 Jul 2003

AB The copolymers are manufactured by suspension polymerization of water-soluble N-containing monomers and ethylenically unsatd. monomers in the presence of polymerization catalysts satisfying decomposition amount of the catalysts to 100 g monomers per 1 h (X) ≥ 0.5 mmol derived from expressions $X = (W_0 - W_1)/M_w$, $W_1 = W_0 \exp(-kt)$, and $\ln k = \ln A - E_a/RT$ [W_0 = initial addition weight (g) of polymerization catalysts to 100 g monomers; W_1 = residual catalyst weight to 100 g monomers after 1-h polymerization; k = decomposition rate constant (s⁻¹); t = time (3600 s); A = frequency factor; E_a = activation energy (cal/mol); R = gas constant (1.987 cal/mol-K); T = absolute temperature (K); M_w = mol. weight of catalysts]. Thus, polymerization of 300 parts dimethylaminoethyl methacrylate and 200 parts Me methacrylate in the presence of 5 parts V 65 [2,2'-azobis(2,4-dimethylvaleronitrile), X 0.83 mmol] and 5 parts 10% acrylamide- methacryloyloxyethyltrimethylammonium chloride copolymer dispersing agent gave 96% copolymer with N-containing monomer content 59%.

IT 26658-83-3P, Butyl methacrylate-dimethylaminoethyl methacrylate copolymer

(manufacture of N-containing copolymers with narrow particle size distribution by suspension polymerization)

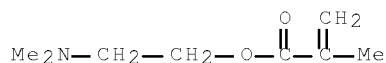
RN 26658-83-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

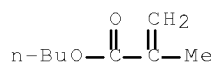
CMF C8 H15 N O2



CM 2

CRN 97-88-1

CMF C8 H14 O2



IC ICM C08F002-18

ICS C08F220-34; C08F220-60

CC 35-3 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

Particle size distribution

(manufacture of N-containing copolymers with narrow particle size distribution by suspension polymerization)

IT 26222-42-4P, Dimethylaminoethyl methacrylate-methyl methacrylate copolymer 26658-83-3P, Butyl methacrylate-dimethylaminoethyl

methacrylate copolymer 137683-21-7P,

Dimethylaminopropylacrylamide-methyl methacrylate copolymer

(manufacture of N-containing copolymers with narrow particle size

distribution by suspension polymerization)

L50 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:434622 HCAPLUS Full-text
 DOCUMENT NUMBER: 139:8202
 TITLE: Pigment compositions with modified ATRP copolymer dispersants
 INVENTOR(S): Auschra, Clemens; Eckstein, Ernst; Zink, Marie-Odile; Muehlebach, Andreas
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003046029	A1	20030605	WO 2002-EP13064	20021121
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2465291	A1	20030605	CA 2002-2465291	20021121
<--				
AU 2002352086	A1	20030610	AU 2002-352086	20021121
<--				
BR 2002014616	A	20040914	BR 2002-14616	20021121
<--				
EP 1465935	A1	20041013	EP 2002-787760	20021121
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005510595	T	20050421	JP 2003-547476	20021121
<--				
CN 1639216	A	20050713	CN 2002-823780	20021121
<--				
CN 100408606	C	20080806		
US 20050004317	A1	20050106	US 2004-495519	20040514
<--				
MX 2004004693	A	20040819	MX 2004-4693	20040518
<--				
US 20060160950	A1	20060720	US 2006-387020	20060321
<--				
PRIORITY APPLN. INFO.:			EP 2001-811158	A 20011129
<--				
			WO 2002-EP13064	W 20021121
<--				
			US 2004-495519	A1 20040514

ED Entered STN: 06 Jun 2003

AB The present invention relates to a composition containing modified block copolymer dispersants and dispersible inorg. or organic pigments. The block copolymers are prepared by atom transfer radical polymerization (ATRP) and modified with a salt forming group. The pigment composition is useful for preparing coating compns., prints, images, inks or lacquers and other disperse systems. A Bu acrylate-2-dimethylaminoethyl acrylate block copolymer dispersant was prepared by ATRP.

IT 143410-36-0F, Butyl acrylate-2-(dimethylamino)ethyl methacrylate graft copolymer
(comb; pigment compns. with modified ATRP copolymer dispersants)

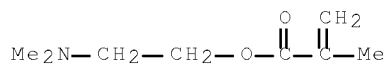
RN 143410-36-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

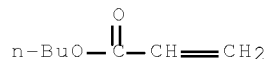
CMF C8 H15 N O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



IT 281198-01-4F, Butyl acrylate-2-Dimethylaminoethyl acrylate block copolymer
(pigment compns. with modified ATRP copolymer dispersants)

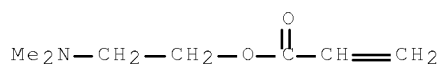
RN 281198-01-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

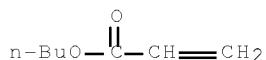
CRN 2439-35-2

CMF C7 H13 N O2



CM 2

CRN 141-32-2
CMF C7 H12 O2



IC ICM C08F293-00
ICS C08L053-00; C08F002-38; C08F004-40; C09D011-00; C08K005-00;
C09D153-00
CC 42-5 (Coatings, Inks, and Related Products)
IT Reinforced plastics
(glass fiber-reinforced; pigment compns. with modified
ATRP copolymer dispersants)
IT 143410-36-0P, Butyl acrylate-2-(dimethylamino)ethyl
methacrylate graft copolymer
(comb; pigment compns. with modified ATRP copolymer dispersants)
IT 9003-49-0DP, Poly-n-butylacrylate, methacrylate-terminated
9003-49-0P, Poly-n-butylacrylate 281198-01-4P, Butyl
acrylate-2-Dimethylaminoethyl acrylate block
copolymer
(pigment compns. with modified ATRP copolymer dispersants)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:94210 HCAPLUS Full-text
DOCUMENT NUMBER: 138:138885
TITLE: Silicone-containing polymer water repellents
INVENTOR(S): Terabayashi, Takeshi; Shimizu, Yoshio; Komatsu,
Masanori; Nakamura, Isae
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2003034784	A	20030207	JP 2001-255307	20010724
			<--	
PRIORITY APPLN. INFO.:			JP 2001-255307	20010724
			<--	

ED Entered STN: 07 Feb 2003

AB The water repellents, showing easy removability when washed with detergents, are prepared from (A) 5-60% silicone macromers
H₂C:CR₁CO₂R₂SiMeh[(OSiMe₂)_jOSiMe₂R₃]_{3-h} [R₁ = H, Me; R₂ = (ether-containing) C₁-6 divalent aliphatic group; R₃ = C₁-30 aliphatic, aromatic, OH group; h = 0, 1, 2; j = 0-500], (B) vinyl monomers containing tertiary amino groups or quaternary ammonium groups, and (C) carboxyl-containing vinyl monomers satisfying mol ratios B/(B + C) 1-40 mol%. Thus, an EtOH solution containing 10% graft copolymer prepared from Silaplane FM 0711 (silicone macromer) 20,

10/534,196

dimethylaminoethyl methacrylate 10, methacrylic acid 40, and tert-Bu methacrylate 30% was sprayed on a cotton fabric and dried to give a test piece showing high water repellency and the same surface appearance and texture as before the spraying.

IT 494197-85-2P, Dimethylaminoethyl methacrylate-methacrylic acid-Silaplane FM 0711-tert-butyl methacrylate graft copolymer

(silicone-containing polymer water repellents)

RN 494197-85-2 HCAPLUS

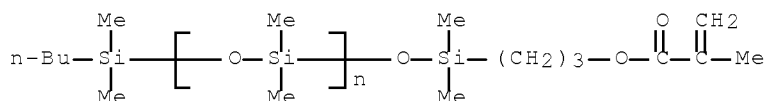
CN 2-Propenoic acid, 2-methyl-, polymer with α -(butyldimethylsilyl)- ω -[[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)], 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 1,1-dimethylethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149925-73-5

CMF (C2 H6 O Si)_n C15 H32 O3 Si2

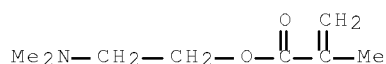
CCI PMS



CM 2

CRN 2867-47-2

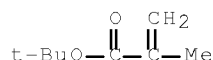
CMF C8 H15 N O2



CM 3

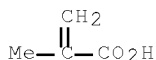
CRN 585-07-9

CMF C8 H14 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM C09K003-18
ICS C08F290-06; C09D004-00; C09D183-07; C23C022-00; C23C026-00;
D06M015-263; D06M015-267; D06M015-643

CC 42-7 (Coatings, Inks, and Related Products)

IT 409323-53-1P, Dimethylaminoethyl methacrylate-methacrylic
acid-Silaplane FM 0711 graft copolymer
~~494197-85-2P~~, Dimethylaminoethyl methacrylate-methacrylic
acid-Silaplane FM 0711-tert-butyl methacrylate graft
copolymer 494197-86-3P, Dimethylaminoethyl
methacrylate-lauryl methacrylate-methacrylic acid-Silaplane FM 0711
graft copolymer
(silicone-containing polymer water repellents)

L50 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:759857 HCAPLUS Full-text

DOCUMENT NUMBER: 138:91441

TITLE: Design of new pigment dispersants by controlled
radical polymerization

AUTHOR(S): Auschra, Clemens; Eckstein, Ernst; Muhlebach,
Andreas; Zink, Marie-Odile; Rime, Francois

CORPORATE SOURCE: Ciba Specialty Chemicals, Segment Coating Effects,
Basel, CH-4002, Switz.

SOURCE: Progress in Organic Coatings (2002),
45(2-3), 83-93
CODEN: POGCAT; ISSN: 0300-9440

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 07 Oct 2002

AB Polymeric pigment dispersants are essential for the formulation of high solids
and waterborne coatings. New technologies for controlled polymerization play
an important role for the development of improved pigment dispersants. In the
last years, big progress has been made especially on nitroxide-mediated
controlled free radical polymerization, as well as on atom transfer radical
polymerization (ATRP). Both techniques overcome limitations of classical
polymerization methods and provide an efficient route to functional copolymers
with exact control of mol. weight distribution and mol. architecture. New
developed nitroxide polymerization regulators as well as ATRP were used for
the synthesis of acrylic block copolymers, which are a promising class of
dispersants, especially for difficult to disperse organic pigments. On the
example of selected pigments, it was investigated how structural parameters
like chemical composition, block length and mol. weight influence the
dispersant performance. Special attention will be given to the rheol.
behavior of pigment concs.

IT ~~281198-01-4P~~, Butyl acrylate-dimethylaminoethyl acrylate block
copolymer
(design of new pigment dispersants by controlled radical polymerization)

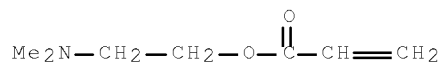
RN 281198-01-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2439-35-2

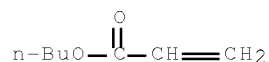
CMF C7 H13 N O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

IT Dispersing agents

Molecular weight

Molecular weight distribution

Pigments, nonbiological

(design of new pigment dispersants by controlled radical polymerization)

IT 281198-01-4P, Butyl acrylate-dimethylaminoethyl acrylate block copolymer

(design of new pigment dispersants by controlled radical polymerization)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:754440 HCAPLUS Full-text

DOCUMENT NUMBER: 137:279621

TITLE: Water-dispersible, cationic polymers, a method of making same and items using same

INVENTOR(S): Branham, Kelly D.; Chang, Yihua; Lang, Frederick J.; McBride, Erin; Bunyard, Clay

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2002077048	A2	20021003	WO 2002-US4943	20020219
			<--	
WO 2002077048	A3	20030424		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
 TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI,
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG,
 CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20030032352 A1 20030213 US 2001-815261 20010322

<--

AU 2002242199 A1 20021008 AU 2002-242199 20020219

<--

AU 2002242199 B2 20070322

EP 1379566 A2 20040114 EP 2002-707820 20020219

<--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004532910 T 20041028 JP 2002-576505 20020219

<--

CN 1608086 A 20050420 CN 2002-809832 20020219

<--

CN 100390212 C 20080528

BR 2002008316 A 20060523 BR 2002-8316 20020219

<--

ZA 2003007029 A 20061129 ZA 2003-7029 20030101

<--

US 20040030080 A1 20040212 US 2003-607412 20030626

<--

MX 2003008244 A 20040129 MX 2003-8244 20030911

<--

KR 849259 B1 20080729 KR 2003-712185 20030919

<--

PRIORITY APPLN. INFO.: US 2001-815261 A 20010322

<--

WO 2002-US4943 W 20020219

<--

ED Entered STN: 04 Oct 2002

AB The present invention is directed to ion-sensitive water-dispersible, triggerable cationic polymers containing ≥ 1 hydrophobic monomer that are insol. in a wetting composition containing an insolubilizing agent such as a divalent metal salt capable of forming complex anions in solution at $>0.5\%$, but are soluble when diluted with water containing other ions such as divalent salt solns. in hard water with ≤ 200 ppm Ca^{2+} and Mg^{2+} . The present invention is also directed to a method of making triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to nonwoven fabrics and webs comprising triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. A typical polymer was manufactured by free-radical polymerization of acrylamide 39.1, Bu acrylate 32.0, 2-ethylhexyl acrylate 18.4, and 2-methacryloyloxyethyltrimethylammonium chloride 27.6 g in MeOH.

IT ~~36347-54-3F~~, Butyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer
~~464174-65-0F~~, Acrylamide-butyl acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer
~~464174-66-1F~~, Butyl acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer
~~464916-47-0F~~, Acrylamide-acrylic acid-butyl

10/534,196

acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium
chloride copolymer

(water-dispersible, cationic polymers for ion-sensitive,
triggerable binders for wet wipes)

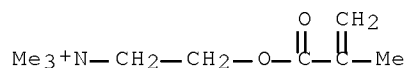
RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-,
chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 5039-78-1

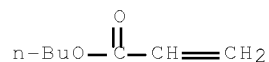
CMF C9 H18 N O2 . Cl



CM 2

CRN 141-32-2

CMF C7 H12 O2



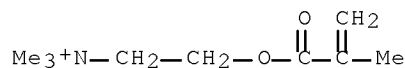
RN 464174-65-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate
and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

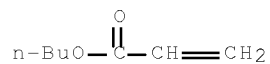
CMF C9 H18 N O2 . Cl



CM 2

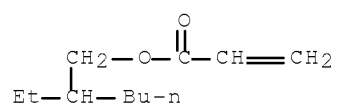
10/534,196

CRN 141-32-2
CMF C7 H12 O2



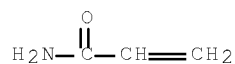
CM 3

CRN 103-11-7
CMF C11 H20 O2



CM 4

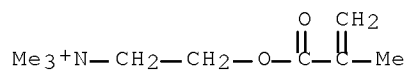
CRN 79-06-1
CMF C3 H5 N O



RN 464174-66-1 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

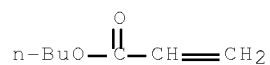
CRN 5039-78-1
CMF C9 H18 N O2 . Cl



10/534,196

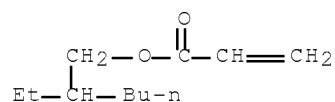
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 103-11-7
CMF C11 H20 O2

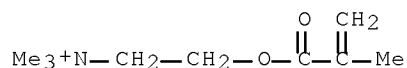


RN 464916-47-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

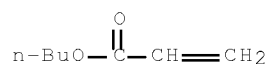
CM 1

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



CM 2

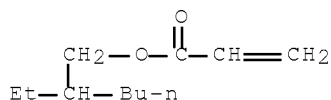
CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 103-11-7

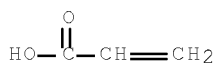
CMF C11 H20 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F220-34

ICS D21H019-20; B05D007-24; D21H017-45; D04H001-64; C11D017-04

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 43, 46, 62

IT ~~36347-54-3P~~, Butyl acrylate-2-

methacryloyloxyethyltrimethylammonium chloride copolymer

~~464174-65-0P~~, Acrylamide-butyl acrylate-2-ethylhexyl

acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer

~~464174-66-1P~~, Butyl acrylate-2-ethylhexyl

acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer

~~464916-47-0P~~, Acrylamide-acrylic acid-butyl

acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer

(water-dispersible, cationic polymers for ion-sensitive, triggerable binders for wet wipes)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:171963 HCAPLUS Full-text

DOCUMENT NUMBER: 136:202196

TITLE: Composition based on nanoparticles or nanolatex of
polymers for treating fabrics during
laundering

INVENTOR(S): Aubay, Eric; Labeau, Marie-pierre; Harrison, Ian

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018451	A2	20020307	WO 2001-FR2649	20010822
<--				
WO 2002018451	A3	20030918		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2813312	A1	20020301	FR 2000-10945	20000825
<--				
FR 2813312	B1	20060714		
FR 2813313	A1	20020301	FR 2001-7590	20010611
<--				
FR 2813313	B1	20070615		
US 20020065208	A1	20020530	US 2001-901679	20010711
<--				
US 7071156	B2	20060704		
CA 2420351	A1	20020307	CA 2001-2420351	20010822
<--				
AU 2001084151	A	20020313	AU 2001-84151	20010822
<--				
BR 2001013381	A	20030610	BR 2001-13381	20010822
<--				
EP 1366083	A2	20031203	EP 2001-963116	20010822
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004512431	T	20040422	JP 2002-523965	20010822
<--				
US 20040038851	A1	20040226	US 2003-362455	20030730
<--				
US 20060211594	A1	20060921	US 2006-436546	20060519
<--				
PRIORITY APPLN. INFO.:			FR 2000-10945	A 20000825
<--				
			FR 2001-7590	A 20010611
<--				
			US 2001-901679	A1 20010711
<--				
			WO 2001-FR2649	W 20010822
<--				

ED Entered STN: 08 Mar 2002

AB The invention concerns the use, in a composition for treating fabrics, especially cotton fabrics, in aqueous or wet medium, of nanoparticles of ≥ 1 polymer or ≥ 1 nanoparticulate latex ≥ 1 polymer insol. in conditions of use in aqueous or wet medium of said composition, as creaseproofing and/or ironing-assist agent. Said composition can be a formulation of solid or liquid detergent, a liquid rinsing and/or a softening formulation, a drying additive contacted with the wet fabric in a dryer, an aqueous ironing formulation, a

prespotter deposited on the dry fabrics prior to a washing operation. The polymer comprises units of hydrophobic nonionic monomers or monomers nonionizable at the use pH, optionally, units of ≥ 1 crosslinking monomer and, optionally, ≥ 1 unit of hydrophilic monomers selected from cationic monomers or monomers cationizable at the use pH, monomers that are amphoteric at the use pH, anionic monomers or monomers anionizable at the use pH, nonionic monomers or monomers nonionizable at use pH.

IT 401809-72-1, Butyl acrylate-2-hydroxyethyl

methacrylate-methacrylic acid-methyl methacrylate-SPE copolymer

(composition based on nanoparticles or nanolatex of polymers for treating fabrics during or prior to laundering)

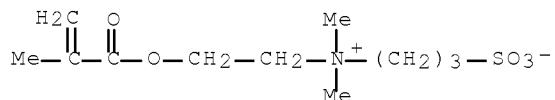
RN 401809-72-1 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 3637-26-1

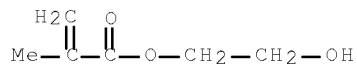
CMF C11 H21 N O5 S



CM 2

CRN 868-77-9

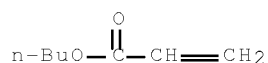
CMF C6 H10 O3



CM 3

CRN 141-32-2

CMF C7 H12 O2



$$\text{Me}-\overset{\text{H}_2\text{C}}{\underset{\text{||}}{\text{C}}}-\overset{\text{O}}{\underset{\text{||}}{\text{C}}}-\text{OMe}$$

CM 5

$$\text{Me}-\overset{\text{CH}_2}{\underset{\parallel}{\text{C}}}-\text{CO}_2\text{H}$$

L50 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:785877 HCAPLUS Full-text
DOCUMENT NUMBER: 135:335210
TITLE: Blood filter material containing graft
copolymers for leukocyte removal
INVENTOR(S): Sasaki, Hiroaki; Hayashi, Shizue; Miura, Morikazu
PATENT ASSIGNEE(S): Asahi Medical Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001300221	A	20011030	JP 2000-127610	20000427
PRIORITY APPLN. INFO.:			JP 2000-127610	20000427

ED Entered STN: 30 Oct 2001

AB The invention relates to a blood filter material for efficient removal of leukocyte, wherein the material contains a graft copolymer consisting of a main chain containing nonionic hydrophilic monomer and basic N-containing monomer, and graft chains containing hydrophobic monomer. A graft copolymer was prepared from Me methacrylate, 2-isocyanatoethyloxy methacrylate, 2-hydroxyethyl methacrylate, and dimethylaminoethyl methacrylate. The graft copolymer was coated on a polyethylene terephthalate fiber to obtain a blood filter material.

IT 370598-77-9P 370598-78-0P
(blood filter material containing graft copolymers
for leukocyte removal)

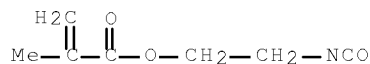
RN 370598-77-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl
2-methyl-2-propenoate and 2-isocyanatoethyl 2-methyl-2-propenoate,
graft (9CI) (CA INDEX NAME)

CM 1

CRN 30674-80-7

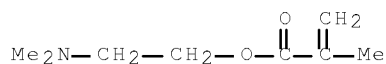
CMF C7 H9 N O3



CM 2

CRN 2867-47-2

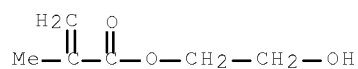
CMF C8 H15 N O2



CM 3

CRN 868-77-9

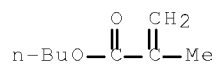
CMF C6 H10 O3



CM 4

CRN 97-88-1

CMF C8 H14 O2



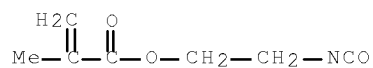
RN 370598-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-isocyanatoethyl
 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -
 methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 30674-80-7

CMF C7 H9 N O3

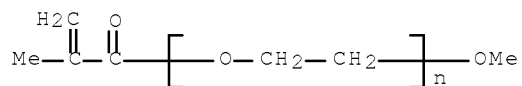


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

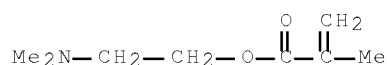
CCI PMS



CM 3

CRN 2867-47-2

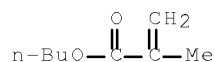
CMF C8 H15 N O2



CM 4

CRN 97-88-1

CMF C8 H14 O2



IC ICM B01D039-14
 ICS A61M001-22; A61M001-36; B01D015-08; B01J020-26; C08F291-00
 CC 63-7 (Pharmaceuticals)
 Section cross-reference(s): 38
 ST methacrylate graft copolymer blood filter
 leukocyte
 IT Polyester fibers, biological studies
 (blood filter material containing fibers coated with
 graft copolymers for leukocyte removal)
 IT Blood
 Leukocyte
 (blood filter material containing graft copolymers
 for leukocyte removal)
 IT Filters
 (fiber; blood filter material containing graft
 copolymers for leukocyte removal)
 IT Polymers, biological studies
 (graft; blood filter material containing graft
 copolymers for leukocyte removal)
 IT 370598-76-8P 370598-77-9P 370598-78-0P
 370598-79-1P
 (blood filter material containing graft copolymers
 for leukocyte removal)

L50 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:565117 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 135:137859

TITLE: Salt-free aqueous dispersions of water-soluble
 (co)polymers based on cationic monomers, method
 for making same and uses thereof

INVENTOR(S): Riondel, Alain; Tembou, N'zudie Denis; Vanhoye,
 Didier

PATENT ASSIGNEE(S): ATOFINA, Fr.; Tembou N'zudie, Denis

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

```

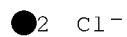
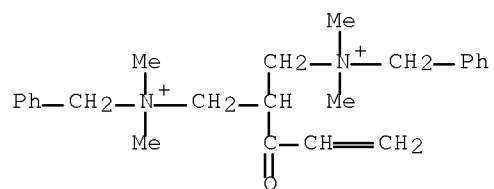
-----
WO 2001055225      A2      20010802      WO 2001-FR183      20010119
                        <--
WO 2001055225      A3      20020404
  W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
      CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,
      GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
      LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,
      PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,
      UA, UG, US, UZ, VN, YU, ZA, ZW
  RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
      CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
      TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
FR 2804122          A1      20010727      FR 2000-833      20000124
                        <--
FR 2804122          B1      20020222
AU 2001035562      A      20010807      AU 2001-35562      20010119
                        <--
EP 1252207          A2      20021030      EP 2001-907647      20010119
                        <--
  R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
      PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003523462      T      20030805      JP 2001-561072      20010119
                        <--
US 20030153675      A1      20030814      US 2002-181821      20021120
                        <--
PRIORITY APPLN. INFO.:      FR 2000-833      A      20000124
                        <--
                        WO 2001-FR183      W      20010119
                        <--

ED  Entered STN:  03 Aug 2001
AB  Salt-free aqueous dispersions of water-soluble polymers containing polymeric
dispersants are manufactured by radical-dispersion polymerization of monomer
mixts. containing 0.5-99.5 mol (based on 100 mol monomer)
CH2:CR1CO2CH(CH2NR2)2 (R1 = H or Me, R2 = Me, Et, Pr, or Bu) which is
quaternized on ≥1 N so that the 4th group on the N is alkyl or PhCH2 and the
anion is halide or MeOSO3-. A typical dispersion was manufactured by radical-
dispersion polymerization of 20 parts 75% aqueous CH2:CHCO2CH(CH2N+Me2CH2Ph)2
2Cl- solution, 67.5 parts 50% aqueous acrylamide solution, 28.12 parts 80%
aqueous acryloyloxyethyltrimethylammonium chloride (I) solution, 3.75 parts Bu
acrylate, and 0.0055 parts ethylene glycol dimethacrylate in the presence of a
76.25:3.84:0.67:19.23 I-methacrylic acid-Sipomer SEM-styrene copolymer
dispersant.
IT  352201-76-4P
      (salt-free dispersions of water-soluble (co)polymers based on cationic
monomers and containing quaternized bis(dialkylaminomethyl)methyl
(meth)acrylate)
RN  352201-76-4 HCAPLUS
CN  1,3-Propanediaminium, N,N,N',N'-tetramethyl-2-(1-oxo-2-propenyl)-N,N'-
bis(phenylmethyl)-, dichloride, polymer with butyl 2-propenoate,
1,2-ethanediyl bis(2-methyl-2-propenoate), 2-propenamide and
N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI)
(CA INDEX NAME)

CM  1

CRN  352201-74-2
CMF  C24 H34 N2 O . 2 Cl

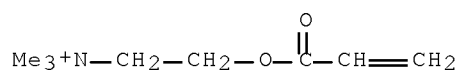
```



CM 2

CRN 44992-01-0

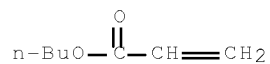
CMF C8 H16 N O2 . Cl



CM 3

CRN 141-32-2

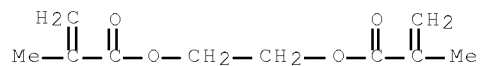
CMF C7 H12 O2



CM 4

CRN 97-90-5

CMF C10 H14 O4



CM 5

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F
 CC 35-4 (Chemistry of Synthetic High Polymers)
 IT Dispersing agents
 (salt-free dispersions of water-soluble (co)polymers from water-soluble monomers and quaternized bis(dialkylaminomethyl)methyl (meth)acrylate for dispersants)
 IT Wetting agents
 (salt-free dispersions of water-soluble (co)polymers from water-soluble monomers and quaternized bis(dialkylaminomethyl)methyl (meth)acrylate for textile wetting agents)
 IT 352201-76-4P
 (salt-free dispersions of water-soluble (co)polymers based on cationic monomers and containing quaternized bis(dialkylaminomethyl)methyl (meth)acrylate)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:526119 HCAPLUS Full-text
 DOCUMENT NUMBER: 135:123953
 TITLE: Comb polymers prepared from ATRP macromonomers
 INVENTOR(S): Muehlebach, Andreas; Rime, Francois; Auschra, Clemens; Eckstein, Ernst
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051534	A1	20010719	WO 2001-EP53	20010104
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2394660	A1	20010719	CA 2001-2394660	20010104
<--				
BR 2001007548	A	20021008	BR 2001-7548	20010104
<--				
EP 1254185	A1	20021106	EP 2001-909579	20010104
<--				

10/534,196

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003519703	T	20030624	JP 2001-551118	20010104
			<--	
CN 1506390	A	20040623	CN 2003-10104756	20010104
			<--	
MX 2002006782	A	20021023	MX 2002-6782	20020710
			<--	
US 20030166755	A1	20030904	US 2002-169884	20020710
			<--	
US 6936656	B2	20050830		
PRIORITY APPLN. INFO.:			EP 2000-810023	A 20000111
			<--	
			CN 2001-1803641	A 20010104
			<--	
			WO 2001-EP53	W 20010104
			<--	

ED Entered STN: 20 Jul 2001

AB Comb polymers and macromonomers based on acrylates prepared by the ATRP (Atom Transfer Radical Polymerization) method having improved capability of dispersing pigments in the given solvent can be used in compns. comprising the comb polymers and macromonomers dispersible inorg. or organic pigment particles such as inks, coating materials and be applied to any suitable substrate, such as metal, wood plastic or ceramic materials. Thus, 5% comb polymer having improved dispersant performance (formed by the copolymn. of macromer acryloyl terminated poly(Bu acrylate) and methyacrylic acid) in a alkyd/melamine based coating system can improve gloss in the final coating and give improved rheol. of the millbase.

IT 350679-82-2P

(comb polymers prepared from ATRP macromonomers)

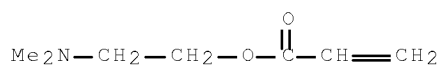
RN 350679-82-2 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, graft (CA INDEX NAME)

CM 1

CRN 2439-35-2

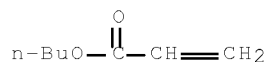
CMF C7 H13 N O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



IT 281198-01-4P

10/534,196

(comb polymers prepared from ATRP macromonomers)

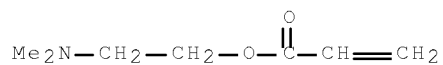
RN 281198-01-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2439-35-2

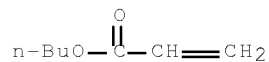
CMF C7 H13 N O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



IT 350236-12-3P 350679-85-5P 350680-38-5P

(comb polymers prepared from ATRP macromonomers)

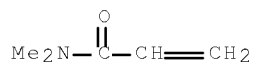
RN 350236-12-3 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate and N,N-dimethyl-2-propenamide, graft (9CI) (CA INDEX
NAME)

CM 1

CRN 2680-03-7

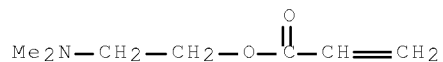
CMF C5 H9 N O



CM 2

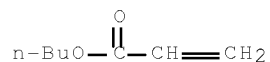
CRN 2439-35-2

CMF C7 H13 N O2



CM 3

CRN 141-32-2
CMF C7 H12 O2



RN 350679-85-5 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate, graft, compd. with (chloromethyl)benzene (9CI) (CA
INDEX NAME)

CM 1

CRN 100-44-7
CMF C7 H7 Cl

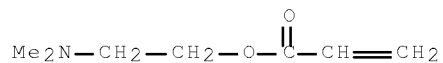


CM 2

CRN 350679-82-2
CMF (C7 H13 N O2 . C7 H12 O2)x
CCI PMS

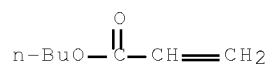
CM 3

CRN 2439-35-2
CMF C7 H13 N O2



CM 4

CRN 141-32-2
CMF C7 H12 O2



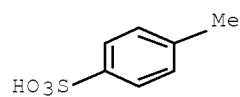
RN 350680-38-5 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
2-propenoate, graft, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 104-15-4

CMF C7 H8 O3 S



CM 2

CRN 350679-82-2

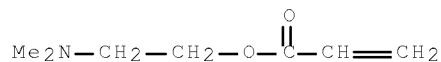
CMF (C7 H13 N O2 . C7 H12 O2)x

CCI PMS

CM 3

CRN 2439-35-2

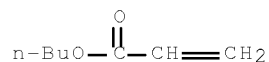
CMF C7 H13 N O2



CM 4

CRN 141-32-2

CMF C7 H12 O2



IC ICM C08F293-00

ICS C08L053-00; C08L051-00; C08F002-38; C08F004-40; C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35


```

IT      Coating materials
        Dispersing agents
        Inks
        Polymerization catalysts
        (comb polymers prepared from ATRP macromonomers)
IT      9003-49-0DP, Butyl acrylate homopolymer, (meth)acryloyl or Br
        terminated 350679-82-2P
        (comb polymers prepared from ATRP macromonomers)
IT      79-10-7DP, Acrylic acid, reaction products with polyacrylate
        79-41-4DP, Methacrylic acid, reaction products with polyacrylate
        1075-49-6DP, 4-Vinylbenzoic acid, reaction products with star-shaped
        polyacrylate 28574-59-6DP, Polydimethylaminoethyl acrylate,
        methacryloyl terminated 281198-01-4P 281198-05-8P
        (comb polymers prepared from ATRP macromonomers)
IT      112718-86-2P, Acrylic acid-butyl acrylate graft copolymer
        116107-73-4P 150673-30-6P 350236-11-2P 350236-12-3P
        350679-85-5P 350680-38-5P
        (comb polymers prepared from ATRP macromonomers)
REFERENCE COUNT:      9      THERE ARE 9 CITED REFERENCES AVAILABLE FOR
                           THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                           RE FORMAT

```

L50 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:453145 HCAPLUS Full-text
DOCUMENT NUMBER: 135:63022
TITLE: Graft copolymer with an amide functional group as
a pigment dispersant
INVENTOR(S): Ma, Sheau-Hwa
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044330	A1	20010621	WO 2000-US34200	20001215
			<--	
W: AT, AU, BR, CA, CH, CN, DE, DK, FI, GB, IN, JP, KR, MX, PT, SE				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,				
NL, PT, SE, TR				
US 6495618	B1	20021217	US 1999-466259	19991217
			<--	
CA 2389362	A1	20010621	CA 2000-2389362	20001215
			<--	
BR 2000016768	A	20020903	BR 2000-16768	20001215
			<--	
EP 1237966	A1	20020911	EP 2000-990228	20001215
			<--	
EP 1237966	B1	20060301		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
PT, IE, FI, CY, TR				
JP 2003517063	T	20030520	JP 2001-544817	20001215
			<--	
AU 781733	B2	20050609	AU 2001-27281	20001215
			<--	
IN 2002MN00551	A	20060505	IN 2002-MN551	20020429
			<--	

10/534,196

MX 2002005944	A	20030128	MX 2002-5944	20020614
			<--	
JP 2007107013	A	20070426	JP 2006-327425	20061204
			<--	
PRIORITY APPLN. INFO.:			US 1999-466259	A 19991217
			<--	
			JP 2001-544817	A3 20001215
			<--	
			WO 2000-US34200	W 20001215
			<--	

ED Entered STN: 22 Jun 2001

AB A polymer dispersant for pigments based on a graft copolymer wherein the graft copolymer has a weight average mol. weight of at least 3000 and has 10-90 parts of a polymeric backbone and 90-10 parts of macromonomer side chains attached to the backbone and wherein at least 20 parts of the polymeric backbone has attached thereto an amide group which serves as a pigment anchoring group. The backbone may also have attached thereto an addnl. pigment anchoring group selected from the group consisting of aromatic ester, aromatic amine, aliphatic amine, and quaternary ammonium groups, or mixts. thereof. These materials disperse a wide variety of pigments and are useful in solvent borne coatings where they can provide improved efficiency of pigment use, lower paint viscosity, and reduced emission of volatile organic solvent. Thus, preparing a macromonomer from Me methacrylate and Bu methacrylate by using diaquabis(borondifluorodiphenylglyoximate) cobaltate(II) as chain transfer agent and Vazo 67 (azo initiator), and polymerizing the macromonomer with N-vinyl-2-pyrrolidone and 2-hydroxyethyl acrylate using tert-Bu peroctoate gave a graft copolymer which was used as dispersant for pigment with good dispersion stability.

IT 345348-93-8P 345348-95-0P 345348-97-2P
345348-98-3P

(dispersing agents; graft copolymer with amide functional group as a pigment dispersant)

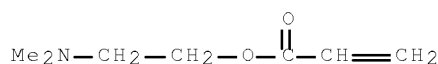
RN 345348-93-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone,
2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, graft
(CA INDEX NAME)

CM 1

CRN 2439-35-2

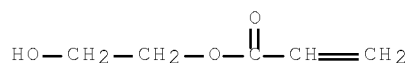
CMF C7 H13 N O2



CM 2

CRN 818-61-1

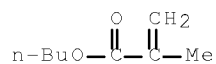
CMF C5 H8 O3



CM 3

CRN 97-88-1

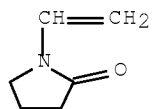
CMF C8 H14 O2



CM 4

CRN 88-12-0

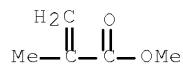
CMF C6 H9 N O



CM 5

CRN 80-62-6

CMF C5 H8 O2



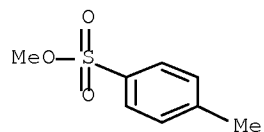
RN 345348-95-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone,
 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, graft,
 compd. with methyl 4-methylbenzenesulfonate (CA INDEX NAME)

CM 1

CRN 80-48-8

CMF C8 H10 O3 S



CM 2

CRN 345348-93-8

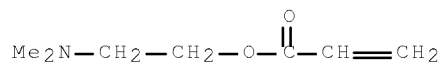
CMF (C8 H14 O2 . C7 H13 N O2 . C6 H9 N O . C5 H8 O3 . C5 H8 O2) x

CCI PMS

CM 3

CRN 2439-35-2

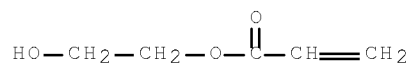
CMF C7 H13 N O2



CM 4

CRN 818-61-1

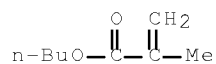
CMF C5 H8 O3



CM 5

CRN 97-88-1

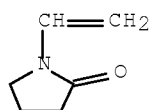
CMF C8 H14 O2



CM 6

CRN 88-12-0

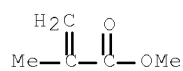
CMF C6 H9 N O



CM 7

CRN 80-62-6

CMF C5 H8 O2



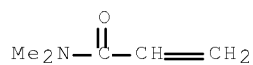
RN 345348-97-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
 2-propenoate, 2-(dimethylamino)ethyl 2-propenoate,
 N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-propenoate, graft
 (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

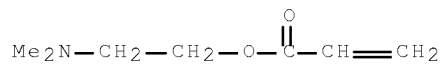
CMF C5 H9 N O



CM 2

CRN 2439-35-2

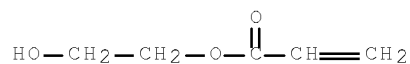
CMF C7 H13 N O2



CM 3

CRN 818-61-1

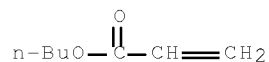
CMF C5 H8 O3



CM 4

CRN 141-32-2

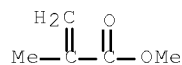
CMF C7 H12 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



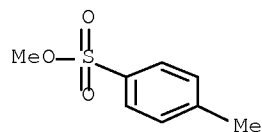
RN 345348-98-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, 2-(dimethylamino)ethyl 2-propenoate,
N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-propenoate, graft,
compd. with methyl 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 80-48-8

CMF C8 H10 O3 S



CM 2

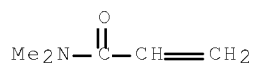
CRN 345348-97-2

10/534,196

CMF (C7 H13 N O2 . C7 H12 O2 . C5 H9 N O . C5 H8 O3 . C5 H8 O2) x
CCI PMS

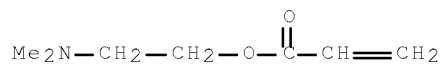
CM 3

CRN 2680-03-7
CMF C5 H9 N O



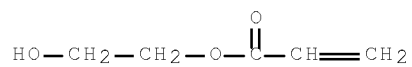
CM 4

CRN 2439-35-2
CMF C7 H13 N O2



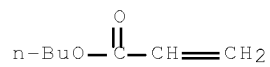
CM 5

CRN 818-61-1
CMF C5 H8 O3



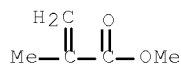
CM 6

CRN 141-32-2
CMF C7 H12 O2



CM 7

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F265-10
ICS C08F271-02; C08F008-30; B01F017-00; C08L051-00
CC 46-4 (Surface Active Agents and Detergents)
Section cross-reference(s): 35, 42
IT Dispersing agents
Pigments, nonbiological
(graft copolymer with amide functional group as a pigment dispersant)
IT 345348-92-7P ~~345348-93-8P~~ 345348-94-9DP, compound with
N-benzylmethylamine ~~345348-95-0P~~ 345348-96-1P
~~345348-97-2P~~ ~~345348-98-3P~~ 345664-80-4P
345664-82-6P
(dispersing agents; graft copolymer with amide functional group as a pigment dispersant)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:881084 HCAPLUS Full-text
DOCUMENT NUMBER: 134:49243
TITLE: Resin composition for ink-jet recording sheet and
recording sheet made with the same
INVENTOR(S): Sumita, Katsuhiko; Kataoka, Kazuya; Kawai,
Kenichi; Omura, Masaya; Iseki, Aika
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 140 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000074945	A1	20001214	WO 2000-JP3611	20000602
<--				
W: US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2000343811	A	20001212	JP 1999-158814	19990604
<--				
JP 2001121814	A	20010508	JP 1999-305781	19991027
<--				
JP 2001123075	A	20010508	JP 1999-305943	19991027
<--				
JP 2001146072	A	20010529	JP 1999-330510	19991119
<--				
JP 2001150804	A	20010605	JP 1999-336876	19991126
<--				
JP 2001171227	A	20010626	JP 1999-360016	19991217
<--				

10/534,196

JP 2001213046	A	20010807	JP 2000-28639	20000207
			<--	
JP 2001219640	A	20010814	JP 2000-33986	20000210
			<--	
EP 1114734	A1	20010711	EP 2000-935535	20000602
			<--	

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, FI

PRIORITY APPLN. INFO.:

JP 1999-158814	A	19990604
<--		
JP 1999-305781	A	19991027
<--		
JP 1999-305943	A	19991027
<--		
JP 1999-330510	A	19991119
<--		
JP 1999-336876	A	19991126
<--		
JP 1999-360016	A	19991217
<--		
JP 2000-28639	A	20000207
<--		
JP 2000-33986	A	20000210
<--		
WO 2000-JP3611	W	20000602
<--		

ED Entered STN: 15 Dec 2000

AB A resin composition for ink-jet recording sheets which comprises (1) a cationic acrylic copolymer having crosslinkable groups, (2) a saponified vinyl acetate copolymer, and (3) a modifier and with which ink-absorbing properties and water resistance are improved. Examples of the modifier include a water-compatible polyurethane resin, a polyurethane-based graft polymer mixture, a polyester-based graft polymer mixture, and a blocked isocyanate compound. With the modifier, the properties of the resin composition are regulated. Usable in place of the copolymer (1) is a cationic acrylic copolymer obtained by copolymerizing a monomer having an alkylene oxide group or an acrylic copolymer obtained by copolymerizing a monomer having a hydrolyzable silyl group. A solution of a cellulose derivative in a mixed solvent is applied and dried to form an image-receiving layer having a network structure. An image-receiving layer comprising a mixture of a copolymer of a monomer having an alkylene oxide group with a hot-melt adhesive is thermally transferred to a fabric after recording.

IT 210779-65-0P, A 174-Butyl acrylate-Blemmer PE
200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer
210779-66-1P, Acrylic acid-A 174-Butyl acrylate-Blemmer PE
200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer
313057-77-1P, Butyl methacrylate-diethylaminoethyl
methacrylate-methyl methacrylate-3-(trimethoxysilyl)propyl
methacrylate copolymer

(resin composition for ink-jet recording sheet from)

RN 210779-65-0 HCAPLUS

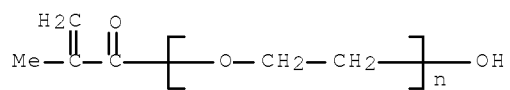
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

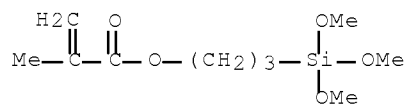
10/534,196

CMF (C2 H4 O)n C4 H6 O2
CCI PMS



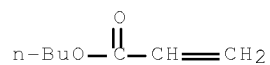
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



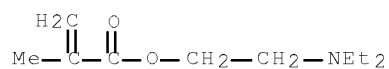
CM 3

CRN 141-32-2
CMF C7 H12 O2



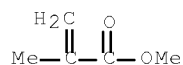
CM 4

CRN 105-16-8
CMF C10 H19 N O2



CM 5

CRN 80-62-6
CMF C5 H8 O2



RN 210779-66-1 HCAPLUS

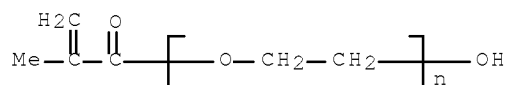
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)_n C4 H6 O2

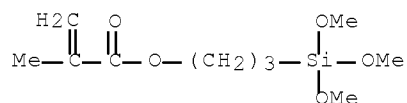
CCI PMS



CM 2

CRN 2530-85-0

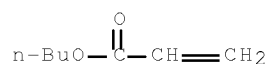
CMF C10 H20 O5 Si



CM 3

CRN 141-32-2

CMF C7 H12 O2

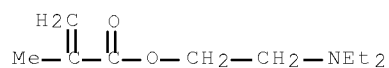


CM 4

CRN 105-16-8

10/534,196

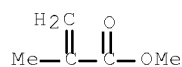
CMF C10 H19 N O2



CM 5

CRN 80-62-6

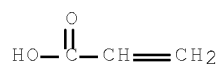
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



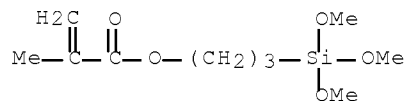
RN 313057-77-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(diethylamino)ethyl 2-methyl-2-propenoate, methyl
2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0

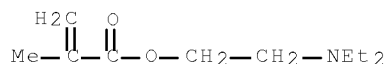
CMF C10 H20 O5 Si



CM 2

CRN 105-16-8

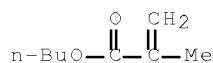
CMF C10 H19 N O2



CM 3

CRN 97-88-1

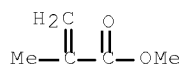
CMF C8 H14 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT 210779-65-0P, A 174-Butyl acrylate-Blemmer PE

200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer

210779-66-1P, Acrylic acid-A 174-Butyl acrylate-Blemmer PE

200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer

313057-77-1P, Butyl methacrylate-diethylaminoethyl

methacrylate-methyl methacrylate-3-(trimethoxysilyl)propyl

methacrylate copolymer

(resin composition for ink-jet recording sheet from)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:50080 HCAPLUS Full-text

DOCUMENT NUMBER: 132:93817

TITLE: Producing amphoteric resin as dispersant or binder
for pigments used in weather-resistant paints and
inks

INVENTOR(S): Tamazawa, Mitsuo; Kuroda, Yasuo

PATENT ASSIGNEE(S): Taisei Chemical Industries Ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 972783	A1	20000119	EP 1999-305531	19990713
			<--	
EP 972783	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2963897	B2	19991018	JP 1998-200544	19980715
			<--	
JP 2000026560	A	20000125		
AT 241653	T	20030615	AT 1999-305531	19990713
			<--	
US 6174963	B1	20010116	US 1999-353610	19990714
			<--	
PRIORITY APPLN. INFO.:			JP 1998-200544	A 19980715
			<--	

ED Entered STN: 21 Jan 2000

AB An amphoteric resin is made by graft copolymerization on the main chain of an α,β -ethylenically unsaturated component C, a copolymerizable basic prepolymer A2 which is obtained by reacting together (i) a prepolymer A1 which is obtained by polymerization of a first α,β -ethylenically polymerizable compound and a polymerization initiator containing a terminal carboxyl group, and (ii) a compound having an epoxy group such as glycidyl (meth)acrylate, in an amount 0.1-1.0 equiv to the amino group equivalent of the prepolymer A1; and an α,β -ethylenically polymerizable acidic prepolymer B2, which is obtained by an analogous procedure to prepare A2. The resulting resin has superior dispersibility for functional compounds such as various pigments and improved weather resistance. A well dispersed pigment used as a binder the graft copolymer (preparation given) of acrylic acid, Bu acrylate, cyclohexyl methacrylate, dimethylaminoethyl methacrylate, glycidyl methacrylate, 2-hydroxyethyl methacrylate, and Me methacrylate.

IT 255052-89-2P, Acrylic acid-butyl acrylate-cyclohexyl methacrylate-N,N-dimethylaminoethyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate-2-methacryloyloxyethyl phthalic acid-methyl methacrylate graft copolymer (producing amphoteric resin as dispersant or binder for pigments used in weather-resistant paints and inks)

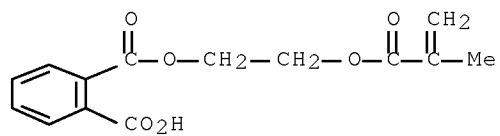
RN 255052-89-2 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with butyl 2-propenoate, cyclohexyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 27697-00-3
 CMF C14 H14 O6

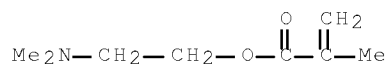
10/534,196



CM 2

CRN 2867-47-2

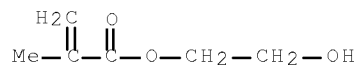
CMF C8 H15 N O2



CM 3

CRN 868-77-9

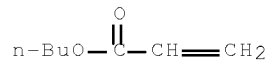
CMF C6 H10 O3



CM 4

CRN 141-32-2

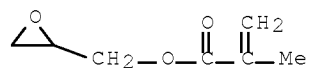
CMF C7 H12 O2



CM 5

CRN 106-91-2

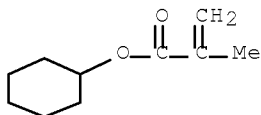
CMF C7 H10 O3



CM 6

CRN 101-43-9

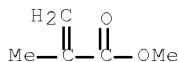
CMF C10 H16 O2



CM 7

CRN 80-62-6

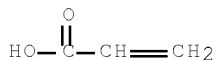
CMF C5 H8 O2



CM 8

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F290-04

ICS C08F290-12; C09D151-00

CC 35-4 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

Pigments, nonbiological

(producing amphoteric resin as dispersant or binder for pigments used in weather-resistant paints and inks)

IT 255052-89-2P, Acrylic acid-butyl acrylate-cyclohexyl

methacrylate-N,N-dimethylaminoethyl methacrylate-glycidyl

methacrylate-2-hydroxyethyl methacrylate-2-methacryloyloxyethyl

phthalic acid-methyl methacrylate graft copolymer

(producing amphoteric resin as dispersant or binder for pigments used in weather-resistant paints and inks)

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L50 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:723884 HCAPLUS Full-text

DOCUMENT NUMBER: 132:279594

TITLE: Electrolyte stability of the MBHD copolymer latex

AUTHOR(S): Yu, Zhangqing; Li, Bogeng; Pan, Zuren

CORPORATE SOURCE: Institute of Chemical Engineering, South China
University of Technology, Peop. Rep. China

SOURCE: Huanan Ligong Daxue Xuebao, Ziran Kexueban (1999), 27(9), 117-121

CODEN: HLDKEZ; ISSN: 1000-565X

PUBLISHER: Huanan Ligong Daxue Xuebao Bianji Weiyuanhui

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 14 Nov 1999

AB The MBHD copolymer latex of Me methacrylate, Bu acrylate, hydroxyethyl methacrylate (HEMA) and dimethylaminoethyl methacrylate (DMAEMA) is synthesized. The effects of the monomer feed rate, polymerization temperature, the weight ratio of the non-ionic to anionic emulsifier, the emulsifier content, and the content of the HEMA and DMAEMA on the electrolyte stability of the latex are investigated. The results show that a higher content of the HEMA, DMAEMA, and the emulsifiers is favorable for the electrolyte stability of the latex. The introduction of the monomer HEMA may improve the electrolyte stability of the copolymer latex because of the higher hydrophilicity of the particles. Raising polymerization temperature is also beneficial to the electrolyte stability of the latex due to the fact that bigger particles are formed. The electrolyte stability of the latex prepared by batch process is worse than that prepared by semi-continuous process.

IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (preparation and electrolyte stability of Bu acrylate-dimethylaminoethyl methacrylate-hydroxyethyl methacrylate-Me methacrylate copolymer latex)

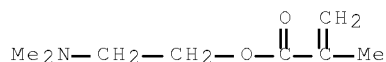
RN 72122-73-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

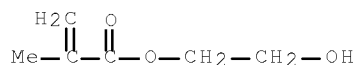
CMF C8 H15 N O2



CM 2

CRN 868-77-9

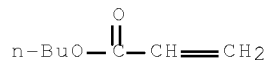
CMF C6 H10 O3



CM 3

CRN 141-32-2

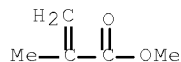
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42, 46

IT Emulsifying agents

(anionic, SLS; electrolyte stability of MBHD copolymer latex)

IT Emulsifying agents

(nonionic, OP-10; electrolyte stability of MBHD copolymer latex)

IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer

(preparation and electrolyte stability of Bu acrylate-dimethylaminoethyl

methacrylate-hydroxyethyl methacrylate-Me methacrylate copolymer

latex)

L50 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:698156 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 131:315878

TITLE: Cationic emulsions obtained by radical
polymerization and ink-jet printing sheets
containing themINVENTOR(S): Torii, Nobuhiro; Umemura, Yutaka; Michimoto,
MasahiroPATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan; Chuo Rika
Kogyo K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11302337	A	19991102	JP 1998-107715	19980417
			<--	
JP 3490290	B2	20040126		
PRIORITY APPLN. INFO.:			JP 1998-107715	19980417
			<--	

ED Entered STN: 02 Nov 1999

AB The emulsions are obtained by radical polymerization of tertiary and/or quaternary amino-containing radically polymerizable monomers and comonomers in the presence of EVA aqueous emulsions. The printing sheets contain the emulsions as white pigment layers, mirror layers, or internal layers. The emulsions show good storage stability and give ink-jet printing paper with good water resistance and high resolution

IT ~~62470-14-8P~~ ~~80044-52-6P~~, Butyl acrylate-dimethylaminoethyl acrylate-methyl methacrylate copolymer ~~154500-22-8P~~
(cationic emulsions obtained by radical polymerization for high-resolution ink-jet printing paper)

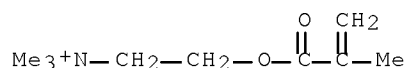
RN 62470-14-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

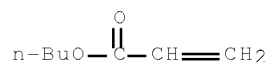
CRN 5039-78-1

CMF C9 H18 N O2 . C1



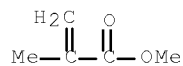
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



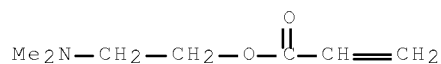
RN 80044-52-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate and 2-(dimethylamino)ethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 2439-35-2

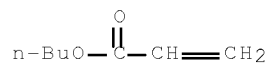
CMF C7 H13 N O2



CM 2

CRN 141-32-2

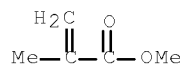
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



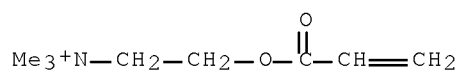
RN 154500-22-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride
(1:1), polymer with butyl 2-propenoate and methyl
2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 44992-01-0

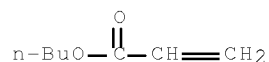
CMF C8 H16 N O2 . Cl



CM 2

CRN 141-32-2

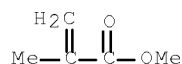
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08F255-02

ICS B41M005-00; C08F263-04; C08L051-00; C09D151-00; C09D151-06;
D21H019-44CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

Section cross-reference(s): 35, 38

IT Emulsifying agents

(EVA; cationic emulsions obtained by radical polymerization for
high-resolution ink-jet printing paper)

IT 62470-14-8P 80044-52-6P, Butyl

acrylate-dimethylaminoethyl acrylate-methyl methacrylate copolymer
154500-22-8P(cationic emulsions obtained by radical polymerization for high-resolution
ink-jet printing paper)

L50 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:458927 HCAPLUS Full-text

DOCUMENT NUMBER: 131:88320

TITLE: Stable aqueous dispersions based on water-soluble
polymers containing a cationic polymeric
dispersant having hydrophobic groups

INVENTOR(S): Tembou, Nzudie Denis; Collette, Christian

10/534,196

PATENT ASSIGNEE(S): Elf Atochem S. A., Fr.
 SOURCE: Fr. Demande, 13 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2770526	A1	19990507	FR 1997-13859	19971104
			<--	
FR 2770526	B1	20000114		
EP 915103	A1	19990512	EP 1998-402667	19981027
			<--	
			R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO	
US 6225395	B1	20010501	US 1998-182651	19981030
			<--	
AU 9890528	A	19990603	AU 1998-90528	19981102
			<--	
AU 719694	B2	20000518		
NO 9805127	A	19990505	NO 1998-5127	19981103
			<--	
CN 1224727	A	19990804	CN 1998-125824	19981104
			<--	
JP 11217410	A	19990810	JP 1998-313810	19981104
			<--	
PRIORITY APPLN. INFO.:			FR 1997-13859	A 19971104
			<--	

ED Entered STN: 27 Jul 1999

AB Low-viscosity, highly concentrated, stable aqueous dispersion of water-soluble polymers are manufactured in the presence of polymeric dispersants containing repeating units of ≥ 1 water-soluble monomer 15-99, repeating units of ≥ 1 water-insol. monomer 1-85, and repeating units of ≥ 1 amphiphilic monomer. A typical dispersant was manufactured by radical polymerization of 140 parts styrene with 175 parts 80% aqueous solution of acryloyloxyethyltrimethylammonium chloride in an EtOH-MEK mixture

IT 211106-71-7P

(stable aqueous dispersions based on water-soluble polymers containing a cationic polymeric dispersant having hydrophobic groups)

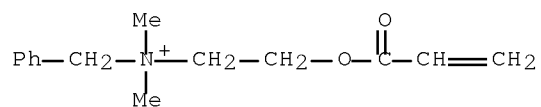
RN 211106-71-7 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with butyl 2-propenoate and 2-propenamide (9CI)
 (CA INDEX NAME)

CM 1

CRN 46830-22-2

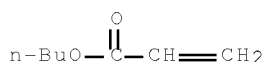
CMF C14 H20 N O2 . C1



CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F212-08

ICS C08F220-56; C08F002-22

ICI C08F212-08, C08F220-34; C08F220-56, C08F220-34, C08F220-18

CC 35-4 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

(stable aqueous dispersions based on water-soluble polymers containing a cationic polymeric dispersant having hydrophobic groups)

IT 211106-71-7F

(stable aqueous dispersions based on water-soluble polymers containing a cationic polymeric dispersant having hydrophobic groups)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:457938 HCAPLUS Full-text

DOCUMENT NUMBER: 131:89184

TITLE: Two-phase pigmented ink jet inks

INVENTOR(S): Reardon, Joseph Edward

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 928821	A1	19990714	EP 1999-100011	19990104
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11263931	A	19990928	JP 1999-5799	19990112
<--				
PRIORITY APPLN. INFO.:			US 1998-5709	A 19980112
<--				

ED Entered STN: 27 Jul 1999

AB Two-phase ink jet ink compns. have an aqueous continuous phase containing water and an ionic component and a non-aqueous and discontinuous phase containing a non-aqueous vehicle, a colorant and an ionic polymer, wherein the ionic polymer functions as a dispersant and a binder and has a ionic charge opposite that of the ionic component in the aqueous phase. Preparing a 75/5/20 ethylhexyl methacrylate-iso-Bu methacrylate-hydroxyethyl methacrylate (I) macromer, adding Vazo 88 2.5, PhMe 19, Me methacrylate 37, styrene 10, Et acrylate 26, I 20, and dimethylaminoethyl methacrylate 7 g to a kettle containing 67.4 g of the macromer and 65 g PhMe, heating to 100°, milling the block copolymer 37, cyan pigment (BT 617D) 19, and Bu cellosolve 44 g, mixing (25 g) with 4.9 g citric acid and 30.9 g water, and stirring with water 16.4, imidazolidone 31, and ethylene glycol 25 g gave an ink. The ink was printed using an ink jet printer onto a cotton fabric, showing good washfastness.

IT 229948-05-4F, Ethylhexyl methacrylate-isobutyl methacrylate-hydroxyethyl methacrylate-methyl methacrylate-styrene-ethyl acrylate-dimethylaminoethyl methacrylate block copolymer citric acid salt
 (binder and dispersant; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)

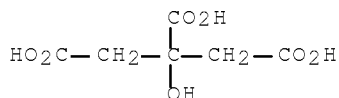
RN 229948-05-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate, block, 2-hydroxy-1,2,3-propanetricarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 77-92-9

CMF C6 H8 O7



CM 2

CRN 229948-04-3

10/534,196

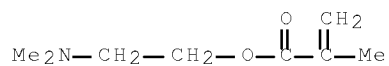
CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2 . C8 H8 . C6 H10 O3 . C5 H8 O2 . C5 H8 O2)x

CCI PMS

CM 3

CRN 2867-47-2

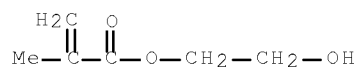
CMF C8 H15 N O2



CM 4

CRN 868-77-9

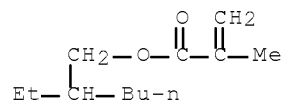
CMF C6 H10 O3



CM 5

CRN 688-84-6

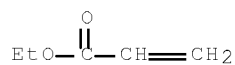
CMF C12 H22 O2



CM 6

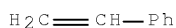
CRN 140-88-5

CMF C5 H8 O2



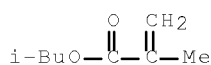
CM 7

CRN 100-42-5
CMF C8 H8



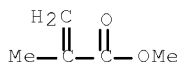
CM 8

CRN 97-86-9
CMF C8 H14 O2



CM 9

CRN 80-62-6
CMF C5 H8 O2



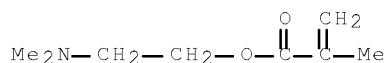
IC ICM C09D011-00
CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 40
IT **Textiles**
(cotton; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)
IT **Textile printing**
(two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)
IT 229948-05-4P, Ethylhexyl methacrylate-isobutyl methacrylate-hydroxyethyl methacrylate-methyl methacrylate-styrene-ethyl acrylate-dimethylaminoethyl methacrylate block copolymer citric acid salt
(binder and dispersant; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:393337 HCAPLUS Full-text
DOCUMENT NUMBER: 131:158868
TITLE: Stability of the GHD latex crosslinkable at

ambient temperature
 AUTHOR(S): Yu, Zhang-Qing; Li, Bo-Geng; Li, Bao-Fang; Pan, Zu-Ren
 CORPORATE SOURCE: Inst. Chem. Eng., South China Univ. Technol., Canton, 510641, Peop. Rep. China
 SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1999), 20(6), 978-983
 CODEN: KTHPDM; ISSN: 0251-0790
 PUBLISHER: Gaodeng Jiaoyu Chubanshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 28 Jun 1999
 AB The glycidyl methacrylate (GMA)-hydroxyl methacrylate (HEMA)-dimethylaminoethyl methacrylate (DMAEMA) copolymer latex (GHD) which is crosslinkable at ambient temperature, was synthesized. In presence of the seed latex of Me methacrylate (MMA)-Bu acrylate (BA)-GMA, the effect of the polymerization technol. and the recipes on the process stability of the emulsion copolymn. of MMA-BA-HEMA-DMAEMA and the shelf life of the obtained crosslinkable latex were studied. The process stability and the shelf life of the latex were improved as more emulsifier was used. When the polymerization temperature is raised, the process stability becomes worse because the crosslinking coagulation is increased, but the shelf life of the latex becomes longer because of the smaller particles and the lower surface tension. Raising the glass transition temperature (Tg) of the seed polymer can depress the crosslinking coagulation during the copolymn. and improve the process stability. Increasing the content of HEMA and DMAEMA has little effect on the process stability but it reduces the shelf life of the latex. When the functional groups are separated through the particle designing, the latex with acceptable shelf life is obtained. The crosslinking coagulation among functional groups may be the key factor which detcs. the process stability and the shelf life of the latex crosslinked at ambient temperature Coating methacrylate copolymer self crosslinkable.
 IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (latex; preparation and stability of room-temperature crosslinkable)
 RN 72122-73-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

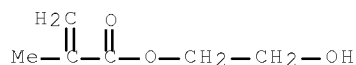
CM 1

CRN 2867-47-2
 CMF C8 H15 N O2



CM 2

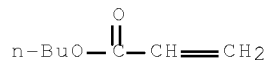
CRN 868-77-9
 CMF C6 H10 O3



CM 3

CRN 141-32-2

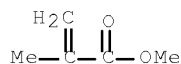
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

IT **Emulsifying agents**

(OP 10 and sodium laurylsulfate; preparation and stability of room-temperature

crosslinkable Bu acrylate-dimethylaminoethyl methacrylate-Me
methacrylate-2-hydroxyethyl methacrylate copolymer latex)

IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
(latex; preparation and stability of room-temperature crosslinkable)

L50 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:349445 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 131:144899

TITLE: Stability of emulsion copolymerization system of
MMA-BA-DMAEMAAUTHOR(S): Yu, Zhang-Qing; Li, Bog-Eng; Li, Bao-Fang; Pan,
Zu-RenCORPORATE SOURCE: Institute of Polymer Science & Technology,
Zhejiang Univ., Hangzhou, 310027, Peop. Rep. ChinaSOURCE: Zhejiang Daxue Xuebao, Ziran Kexueban (
1999), 33(1), 57-62

CODEN: ZDXKE5; ISSN: 0253-9861

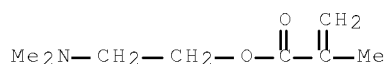
PUBLISHER: Zhejiang Daxue

DOCUMENT TYPE: Journal

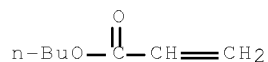
LANGUAGE: Chinese

ED Entered STN: 08 Jun 1999

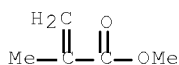
- AB The terpolymer latex of MMA-BA-DMAEMA was prepared in both batch and semi-continuous emulsion copolymers. The effects of emulsifier type and concentration, polymerization temperature, the feed policy and feed rate of emulsified monomer on the stability of polymerization system were studied systematically. The HLB is not a critical value for selecting the emulsifier used in the emulsion polymerization containing DMAEMA. The available method for determining emulsifier system is still directly by the stability observation in the polymerization runs. The emulsifier type is a key factor influencing the stability of polymerization system. An increase in the emulsifier concentration and a decrease of polymerization temperature improved the stability of polymerization system. The content of functional monomer DMAEMA does not affect the stability of polymerization system obviously. A reduction of the feed rate of the emulsified monomers is favorable to the stability of polymerization system. The stability of batch polymerization is better than that of semi-continuous polymerization for this system, but the seeded and unseeded semi-continuous emulsion polymerization processes are similar in polymerization stability.
- IT 35166-02-08, Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer
(stability of emulsion copolymer system of MMA, BA, and dimethylaminoethyl methacrylate with different emulsifiers)
- RN 35166-02-0 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)
- CM 1
- CRN 2867-47-2
- CMF C8 H15 N O2



- CM 2
- CRN 141-32-2
- CMF C7 H12 O2



- CM 3
- CRN 80-62-6
- CMF C5 H8 O2

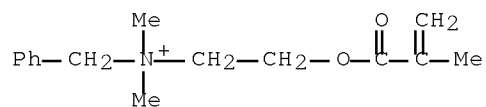


CC 35-4 (Chemistry of Synthetic High Polymers)
 IT Emulsifying agents
 (stability of emulsion copolymn. system of MMA, BA, and
 dimethylaminoethyl methacrylate with different emulsifiers)
 IT 35166-02-0P, Butyl acrylate-dimethylaminoethyl
 methacrylate-methyl methacrylate copolymer
 (stability of emulsion copolymn. system of MMA, BA, and
 dimethylaminoethyl methacrylate with different emulsifiers)

L50 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:56817 HCAPLUS Full-text
 DOCUMENT NUMBER: 130:160642
 TITLE: Manufacture of electrophotographic toner with
 stable positive chargeability
 INVENTOR(S): Kishimoto, Takuji; Masuo, Kojiro
 PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 11015192	A	19990122	JP 1997-183014	19970624
			<--	
JP 3255088	B2	20020212		
PRIORITY APPLN. INFO.:			JP 1997-183014	19970624
			<--	

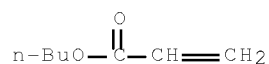
ED Entered STN: 27 Jan 1999
 AB A monomer is suspension polymerized in the presence of (A) 0.01-10 parts
 (based on 100 parts of the monomer) a copolymer from (a1) a (meth)acrylate
 monomer having a quaternary ammonium salt group, (a2) a (meth)acrylate
 monomer, and (a3) an aryl-containing vinylic monomer, (B) a colorant, and (C)
 0.01-10 parts an inorg. cationic dispersant. The copolymer A shows
 polystyrene-converted Mw (by GPC in THF) 25,000-1,000,000 and includes the a1-
 derived unit 0.01-0.4 mol%.
 IT 220170-89-8P 220170-90-1P
 (charge controlling agent; electrophotog. toner including
 quaternary-ammonium-salt-containing acrylic polymer and showing stable
 chargeability)
 RN 220170-89-8 HCAPLUS
 CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-
 propenyl)oxy]ethyl]-, chloride, polymer with butyl 2-propenoate and
 ethenylbenzene (9CI) (CA INDEX NAME)
 CM 1
 CRN 46917-07-1
 CMF C15 H22 N O2 . C1



CM 2

CRN 141-32-2

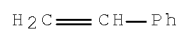
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



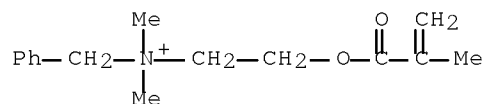
RN 220170-90-1 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 1,4-butanediyl di-2-propenoate, butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

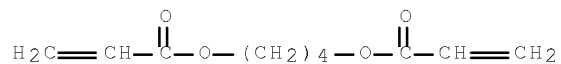
CM 1

CRN 46917-07-1

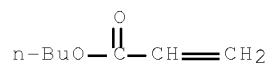
CMF C15 H22 N O2 . Cl



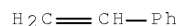
CM 2

CRN 1070-70-8
CMF C10 H14 O4

CM 3

CRN 141-32-2
CMF C7 H12 O2

CM 4

CRN 100-42-5
CMF C8 H8

- IC ICM G03G009-087
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
IT **Dispersing agents**
(cationic; electrophotog. toner including quaternary-ammonium-salt-containing acrylic polymer and showing stable chargeability)
IT **220170-89-8P 220170-90-1P**
(charge controlling agent; electrophotog. toner including quaternary-ammonium-salt-containing acrylic polymer and showing stable chargeability)

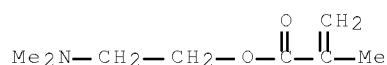
L50 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:629082 HCAPLUS Full-text
DOCUMENT NUMBER: 130:4140
TITLE: Factors affecting particle size and its distribution of MMA-BA-DMAEMA copolymer emulsion
AUTHOR(S): Yu, Zhangqing; Li, Bogeng; Pan, Zuren
CORPORATE SOURCE: Institute of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep.

China
 SOURCE: Tuliao Gongye (1997), (5), 5-6
 CODEN: TLKYD5; ISSN: 0253-4312
 PUBLISHER: Huagongbu Tuliao Gongye Yanjiuso
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 06 Oct 1998
 AB The MMA (Me methacrylate)-BA (Bu acrylate)-DMAEMA (dimethylaminoethyl methacrylate) copolymer emulsion was prepared with batch or semi-continuous emulsion polymerization process. The effect of compound emulsifier ratio and amount, reaction temperature, polymerization type, and amount of functional monomers on the emulsion resin particle size and size distribution was studied.
 IT 35166-02-00, Butyl acrylate-N,N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer (factors affecting particle size and distribution of Me methacrylate-Bu acrylate-dimethylaminoethyl methacrylate copolymer emulsion)
 RN 35166-02-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

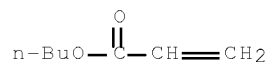
CMF C8 H15 N O2



CM 2

CRN 141-32-2

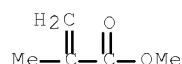
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37
 IT ~~Emulsifying agents~~
 (effect on particle size and distribution of Me methacrylate-Bu
 acrylate-dimethylaminoethyl methacrylate copolymer emulsion)
 IT 35166-02-0P, Butyl acrylate-N,N-dimethylaminoethyl
 methacrylate-methyl methacrylate copolymer
 (factors affecting particle size and distribution of Me
 methacrylate-Bu acrylate-dimethylaminoethyl methacrylate copolymer
 emulsion)

L50 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:217349 HCAPLUS Full-text
 DOCUMENT NUMBER: 128:326301
 ORIGINAL REFERENCE NO.: 128:64599a
 TITLE: Hair cosmetic compositions
 INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;
 Ito, Kayo; Hayama, Kazuhide
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan;
 Mitsubishi Chemical Corp.
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

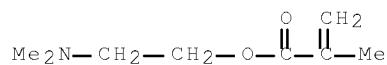
PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
JP 10087439	A	19980407	JP 1996-239409	19960910
			<--	
JP 3620163	B2	20050216		
US 6375932	B1	20020423	US 1997-925669	19970909
			<--	
CN 1176094	A	19980318	CN 1997-118471	19970910
			<--	
CN 1151769	C	20040602		
PRIORITY APPLN. INFO.:			JP 1996-239406	A 19960910
			<--	
			JP 1996-239409	A 19960910
			<--	
			JP 1996-244910	A 19960917
			<--	
			JP 1996-246055	A 19960918
			<--	

ED Entered STN: 17 Apr 1998
 AB Hair cosmetic compns. showing excellent hair treatment effects contain:
 (A) amine oxide group-containing copolymers having mol. weight 10,000-500,000
 and (B) anionic polymers such as Diahold LP 503 and Gantrez ES-225 [in which
 A/B = 1/10 - 10/1 and A + B = 0.1 - 10 weight%]. Hair appeared soft after
 treatment.
 IT 118037-65-3DP, oxidation products
 (hair cosmetic compns.)
 RN 118037-65-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
 with methyl 2-methyl-2-propenoate and 2-methylpropyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

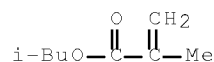
CMF C8 H15 N O2



CM 2

CRN 97-86-9

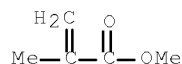
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 118037-65-3DP, oxidation products
(hair cosmetic comps.)

L50 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:214448 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 128:326300

ORIGINAL REFERENCE NO.: 128:64598h,64599a

TITLE: Hair cosmetics

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;
Ito, Kayo; Hayama, KazuhidePATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan;
Mitsubishi Chemical Corp.SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

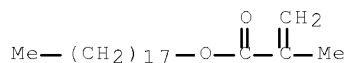
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

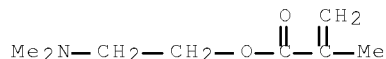
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10087442	A	19980407	JP 1996-244910	19960917
			<--	
JP 3620164	B2	20050216		
US 6375932	B1	20020423	US 1997-925669	19970909
			<--	
CN 1176094	A	19980318	CN 1997-118471	19970910
			<--	
CN 1151769	C	20040602		
PRIORITY APPLN. INFO.:			JP 1996-239406	A 19960910
			<--	
			JP 1996-239409	A 19960910
			<--	
			JP 1996-244910	A 19960917
			<--	
			JP 1996-246055	A 19960918
			<--	
ED	Entered STN: 16 Apr 1998			
AB	Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) cationic polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight%]. A hair spray comprised amine oxide-containing polymer 2.5, UCARE Polymer JR-400 0.5, purified water 45.0, and ethanol to 100 weight%. Hair appeared soft after treatment.			
IT	68714-76-1DP, reaction products with di-Me sulfate 118037-65-3DP, oxidation products (hair cosmetics)			
RN	68714-76-1 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (CA INDEX NAME)			
CM	1			
CRN	32360-05-7			
CMF	C22 H42 O2			



CM 2

CRN 2867-47-2

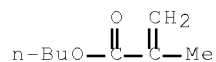
CMF C8 H15 N O2



CM 3

CRN 97-88-1

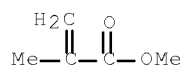
CMF C8 H14 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



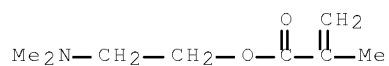
RN 118037-65-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
with methyl 2-methyl-2-propenoate and 2-methylpropyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

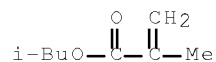
CMF C8 H15 N O2



CM 2

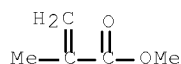
CRN 97-86-9

CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM A61K007-06
ICS A61K007-11
CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 38
IT 41510-85-4DP, oxidation products ~~68714-76-1DP~~, reaction
products with di-Me sulfate ~~118037-65-3DP~~, oxidation products
(hair cosmetics)

L50 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:214447 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326299

ORIGINAL REFERENCE NO.: 128:64595a,64598a

TITLE: Hair cosmetic compositions

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;
Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan;
Mitsubishi Chemical Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 10087438	A	19980407	JP 1996-239406	19960910
			<--	
JP 3620162	B2	20050216		
US 6375932	B1	20020423	US 1997-925669	19970909
			<--	
CN 1176094	A	19980318	CN 1997-118471	19970910
			<--	
CN 1151769	C	20040602		
PRIORITY APPLN. INFO.:			JP 1996-239406	A 19960910
			<--	
			JP 1996-239409	A 19960910
			<--	
			JP 1996-244910	A 19960917
			<--	
			JP 1996-246055	A 19960918
			<--	

ED Entered STN: 16 Apr 1998

AB Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) nonionic polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight%]. A hair gel comprised amine oxide-containing polymer 2.5, Luviskol VA64 1.0, purified water 20.0, and ethanol to 100 weight %. Hair appeared soft after treatment.

IT 118037-65-3DP, oxidation products

(hair cosmetics)

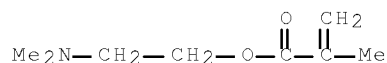
RN 118037-65-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
with methyl 2-methyl-2-propenoate and 2-methylpropyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

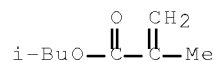
CMF C8 H15 N O2



CM 2

CRN 97-86-9

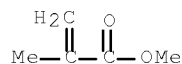
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 72018-12-3P 118037-65-3DP,
oxidation products
(hair cosmetics)

L50 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:210616 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326298

ORIGINAL REFERENCE NO.: 128:64595a,64598a

TITLE: Hair cosmetic compositions

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;
Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan

10/534,196

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
JP 10087443	A	19980407	JP 1996-246055	19960918
			<--	
JP 3620165	B2	20050216		
US 6375932	B1	20020423	US 1997-925669	19970909
			<--	
CN 1176094	A	19980318	CN 1997-118471	19970910
			<--	
CN 1151769	C	20040602		
PRIORITY APPLN. INFO.:			JP 1996-239406	A 19960910
			<--	
			JP 1996-239409	A 19960910
			<--	
			JP 1996-244910	A 19960917
			<--	
			JP 1996-246055	A 19960918
			<--	

ED Entered STN: 15 Apr 1998

AB Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) amphoteric polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight%]. A hair foam comprised amine oxide-containing polymer 2.5, Yukaformer AMPHOSET 0.5, purified water 45, and ethanol to 100 weight %. Hair appeared soft after treatment.

IT 118037-65-3DP, oxidation products
 (hair cosmetics)

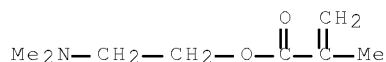
RN 118037-65-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

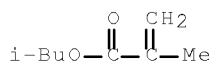
CMF C8 H15 N O2



CM 2

CRN 97-86-9

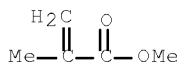
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM A61K007-06

ICS A61K007-11

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 118037-65-3DP, oxidation products
(hair cosmetics)

L50 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:209696 HCAPLUS Full-text

DOCUMENT NUMBER: 128:217869

ORIGINAL REFERENCE NO.: 128:43165a, 43168a

TITLE: Stability of emulsion copolymerization of acrylic
monomers containing amino and hydroxyl groupsAUTHOR(S): Yu, Zhang-Qing; Li, Bo-Geng; Li, Bao-Fang; Pan,
Zu-RenCORPORATE SOURCE: Institute Polymer Science Engineering, Zhejiang
University, Hangzhou, 310027, Peop. Rep. ChinaSOURCE: Gaodeng Xuexiao Huaxue Xuebao (1998),
19(3), 472-476

CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaoyu Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 15 Apr 1998

AB The copolymer latex of MMA-BA-HEMA-DMAEMA (Me methacrylate-Bu acrylate-hydroxyethyl methacrylate-dimethylaminoethyl methacrylate) was prepared in the batch and semi-continuous emulsion copolymerization process. The effects of emulsifier type and concentration, polymerization temperature and the feeding rate of emulsified monomer on the stability of polymerization were studied systematically. The HLB is not critical parameter for selecting the emulsifier used for the emulsion polymerization containing water-soluble monomers. The available method for determining emulsifier system is still directly by the stability observation of the polymerization runs. The increase of functional monomer HEMA and DMAEMA content is beneficial to polymerization stability. The decrease of the polymerization temperature and the reduction of the feeding rate of the emulsified monomers are favorable to the stability of polymerization. The stability of batch polymerization is inferior to that of semi-continuous polymerization for this system. The increase of the emulsifier concentration will improve the stability of polymerization and uniform the particle size.

IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl

10/534,196

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
(stability of emulsion copolymn. of acrylic monomers containing amino
and hydroxyl groups)

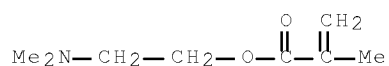
RN 72122-73-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

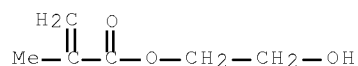
CMF C8 H15 N O2



CM 2

CRN 868-77-9

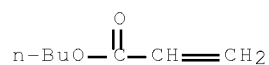
CMF C6 H10 O3



CM 3

CRN 141-32-2

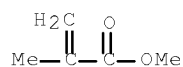
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 35
 IT **Emulsifying agents**
 (effect on stability of emulsion copolymn. of acrylic monomers
 containing amino and hydroxyl groups)
 IT **72122-73-7F**, Butyl acrylate-dimethylaminoethyl
 methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
 (stability of emulsion copolymn. of acrylic monomers containing amino
 and hydroxyl groups)

L50 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1997:701705 HCAPLUS Full-text
 DOCUMENT NUMBER: 127:307807
 ORIGINAL REFERENCE NO.: 127:60211a,60214a
 TITLE: Emulsion polymerization composition for
 impregnation of paper for increased strength
 INVENTOR(S): Watanabe, Minoru; Yamaguchi, Yasuhiro; Tsukiyama,
 Fumitoshi
 PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 09279084	A	19971028	JP 1996-118413	19960416

<--

PRIORITY APPLN. INFO.: JP 1996-118413 19960416

<--

ED Entered STN: 07 Nov 1997

AB Title composition providing good dry and wet tensile strength and folding
 endurance is prepared by emulsion polymerization of
 dialkylaminoalkyl(meth)acrylate 0.1-10, (meth)acrylamide 0.1-30, and itaconic
 acid 0.1-10% in the presence of nonionic emulsifiers. Thus, a composition
 (average particle 0.19 μ m, average viscosity 141 cP) contains emulsion-
 polymerized Na p-styrenesulfonate-diethylaminoethyl methacrylate-
 methacrylamide-itaconic acid-Bu methacrylate-Me methacrylate-Et methacrylate-
 Et acrylate copolymer neutralized by NH₃.

IT **197450-79-6F** 197450-80-9F

(paper impregnation emulsions for improved wet and dry strength and
 folding endurance)

RN 197450-79-6 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl
 2-methyl-2-propenoate, 2-(diethylamino)ethyl 2-methyl-2-propenoate,
 ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, methyl
 2-methyl-2-propenoate, 2-methyl-2-propenamide and sodium
 4-ethenylbenzenesulfonate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 198487-66-0

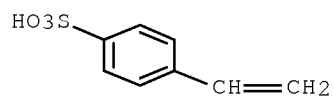
CMF (C10 H19 N O2 . C8 H14 O2 . C8 H8 O3 S . C6 H10 O2 . C5 H8 O2 .
 C5 H8 O2 . C5 H6 O4 . C4 H7 N O . Na)x

CCI PMS

CM 2

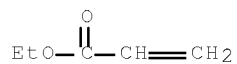
10/534,196

CRN 2695-37-6
CMF C8 H8 O3 S . Na



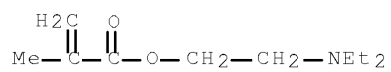
CM 3

CRN 140-88-5
CMF C5 H8 O2



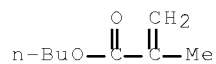
CM 4

CRN 105-16-8
CMF C10 H19 N O2



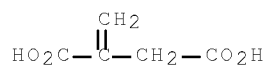
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

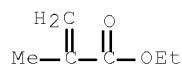
CRN 97-65-4
CMF C5 H6 O4



CM 7

CRN 97-63-2

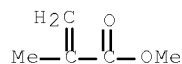
CMF C6 H10 O2



CM 8

CRN 80-62-6

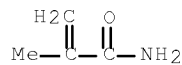
CMF C5 H8 O2



CM 9

CRN 79-39-0

CMF C4 H7 N O



RN 197450-80-9 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl
 2-methyl-2-propenoate, 2-(diethylamino)ethyl 2-methyl-2-propenoate,
 ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl
 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,
 2-methyl-2-propenamide and sodium 4-ethenylbenzenesulfonate, ammonium
 salt (9CI) (CA INDEX NAME)

CM 1

CRN 198487-67-1

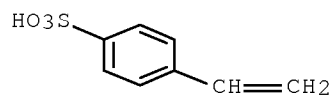
CMF (C10 H19 N O2 . C8 H14 O2 . C8 H8 O3 S . C6 H10 O3 . C6 H10 O2 .
 C5 H8 O2 . C5 H8 O2 . C5 H6 O4 . C4 H7 N O . Na)x

CCI PMS

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na

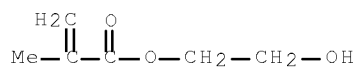


● Na

CM 3

CRN 868-77-9

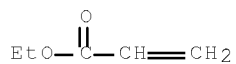
CMF C6 H10 O3



CM 4

CRN 140-88-5

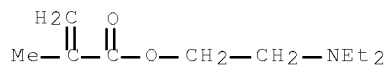
CMF C5 H8 O2



CM 5

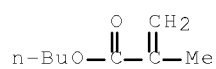
CRN 105-16-8

CMF C10 H19 N O2



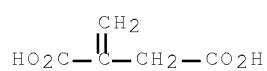
CM 6

CRN 97-88-1
CMF C8 H14 O2



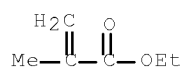
CM 7

CRN 97-65-4
CMF C5 H6 O4



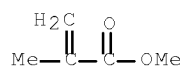
CM 8

CRN 97-63-2
CMF C6 H10 O2



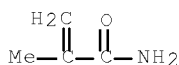
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

CRN 79-39-0
CMF C4 H7 N O



IC ICM C09D133-08
ICS C08F002-30; D21H019-20; C09D133-08; C09D133-14; C09D133-26;
C09D135-00; C09D125-18

CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 43

IT **Emulsifying agents**
Paper
(paper impregnation emulsions for improved wet and dry strength and
folding endurance)

IT 197450-79-6P 197450-80-9P
(paper impregnation emulsions for improved wet and dry strength and
folding endurance)

L50 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:156957 HCAPLUS Full-text

DOCUMENT NUMBER: 124:317989

ORIGINAL REFERENCE NO.: 124:58993a,58996a

TITLE: Synthesis and properties of fluoroalkylated
2-acryloxyethyltrimethylammonium chloride
oligomers

AUTHOR(S): Sawada, Hideo; Katayama, Shinsuke; Oue, Masatoshi;
Kawase, Tokuzo; Hayakawa, Yoshio; Baba, Masanori;
Tomita, Toshio; Mitani, Motohiro

CORPORATE SOURCE: Dep. Chem., Nara Natl. Coll. Technol., Nara,
639-11, Japan

SOURCE: Nihon Yukagakkaishi (1996), 45(2), 161-9
CODEN: NIYUFC; ISSN: 1341-8327

PUBLISHER: Nihon Yukagaku Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

ED Entered STN: 19 Mar 1996

AB New fluoroalkylated oligomers with carbon-carbon bonds and containing
trimethylammonium units were prepared under very mild conditions by reactions
of fluoroalkanoyl peroxides as key materials with 2-
acryloxyethyltrimethylammonium chloride. The oligomers were soluble in water,
methanol, ethanol and DMSO. Fluoroalkanoyl peroxides were also used to
prepare fluoroalkylated co-oligomers containing trimethylammonium units by co-
oligomerization with co-monomers such as trimethylvinylsilane, Me
methacrylate, Et methacrylate and Bu methacrylate. The co-oligomers were
soluble, as well, in not only polar solvents such as water, methanol and
ethanol but non-polar aromatic solvents, such as benzene and toluene.
Fluoroalkylated oligomers containing trimethylammonium units could reduce the
surface tension of water to 10 mN/m, and were applicable to new cationic
oligo-surfactants as well as the usual low mol. fluorinated surfactants, even
though they were high mol. fluoroalkylated compds. The fluorinated oligomers
were inactive toward HIV-1 (human immunodeficiency virus type 1) replication
in MT-4 cells. However, they possessed antibacterial activity toward
Staphylococcus aureus.

IT 176242-57-2DP, [2-(Acryloyloxy)ethyl]trimethylammonium
chloride-butyl methacrylate copolymer, reaction products with
fluoroalkanoyl peroxide
(oligomeric; synthesis and properties of fluoroalkylated
acryloxyethyltrimethylammonium chloride oligomers)

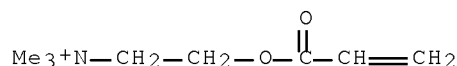
RN 176242-57-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

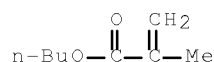
CMF C8 H16 N O2 . Cl



CM 2

CRN 97-88-1

CMF C8 H14 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 46, 63

IT Surfactants

(cationic, synthesis and properties of fluoroalkylated acryloxyethyltrimethylammonium chloride oligomer surfactants)

IT 67183-96-4DP, reaction products with fluoroalkanoyl peroxide
121035-47-0DP, reaction products with fluoroalkanoyl peroxide
176242-57-2DP, [2-(Acryloyloxy)ethyl]trimethylammonium chloride-butyl methacrylate copolymer, reaction products with fluoroalkanoyl peroxide 176242-58-3DP, [2-(Acryloyloxy)ethyl]trimethylammonium chloride-trimethylvinylsilane copolymer, reaction products with fluoroalkanoyl peroxide
176242-59-4P, [2-(Acryloyloxy)ethyl]trimethylammonium chloride-ethyl methacrylate copolymer

(oligomeric; synthesis and properties of fluoroalkylated acryloxyethyltrimethylammonium chloride oligomers)

L50 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:673885 HCAPLUS Full-text

DOCUMENT NUMBER: 123:97818

ORIGINAL REFERENCE NO.: 123:17191a,17194a

TITLE: Cleansing solution for electrophotographic apparatus

INVENTOR(S): Suzuki, Nobuo

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06295143	A	19941021	JP 1993-82064	19930408
<--				
PRIORITY APPLN. INFO.:			JP 1993-82064	19930408
<--				

ED Entered STN: 14 Jul 1995

AB The title ~~cleansing~~ solution contains a nonaq. solvent of elec. resistance $\geq 109 \Omega \cdot \text{cm}$ and dielec. constant ≤ 3.5 and a graft copolymer soluble in the above solvent. The types of the graft copolymer are also claimed.

IT ~~138114-66-6P~~

(prepared for electrophotog. apparatus ~~cleansing~~ solution)

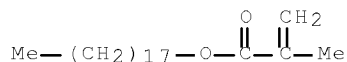
RN 138114-66-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(diethylamino)ethyl 2-methyl-2-propenoate and octadecyl
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

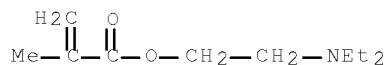
CMF C22 H42 O2



CM 2

CRN 105-16-8

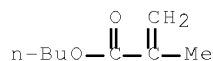
CMF C10 H19 N O2



CM 3

CRN 97-88-1

CMF C8 H14 O2



- IC ICM G03G021-00
ICS G03G015-10
- CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST ~~cleansing~~ soln electrophotog app nonaq solvent; graft copolymer ~~cleansing~~ soln
- IT Electrophotography
(apparatus, ~~cleansing~~ solution containing nonaq. solvent and graft copolymer for)
- IT 25639-21-8DP, Octadecyl methacrylate graft homopolymer, carboxy-terminated 25719-52-2DP, polar group-terminated 124973-68-8DP, Octadecyl methacrylate-styrene graft copolymer, carboxy-terminated 124973-68-8P, Octadecyl methacrylate-styrene graft copolymer 138114-17-7P, Dodecyl methacrylate-methacrylic acid graft copolymer 138114-18-8P 138114-19-9P 138114-20-2P 138114-21-3P 138114-22-4P 138114-23-5P 138114-49-5DP, carboxy-terminated 138114-50-8DP, Methyl methacrylate-octadecyl methacrylate graft copolymer, carboxy-terminated 138114-50-8DP, Methyl methacrylate-octadecyl methacrylate graft copolymer, polar group-terminated 138114-50-8P, Methyl methacrylate-octadecyl methacrylate graft copolymer 138114-51-9DP, carboxy-terminated 138114-51-9P 138114-52-0DP, carboxy-terminated 138114-52-0P, Acrylonitrile-octadecyl methacrylate graft copolymer 138114-53-1DP, carboxy-terminated 138114-53-1P 138114-54-2DP, carboxy-terminated 138114-54-2P 138114-56-4DP, carboxy-terminated 138114-56-4P 138114-57-5DP, carboxy-terminated 138114-57-5P 138114-58-6DP, carboxy-terminated 138114-58-6P 138114-59-7DP, Butyl methacrylate-octadecyl methacrylate graft copolymer, polar group-terminated 138114-60-0DP, Butyl methacrylate-dodecyl methacrylate graft copolymer, polar group-terminated 138114-61-1DP, polar group-terminated 138114-63-3P 138114-64-4P 138114-65-5P ~~138114-66-6P~~ 138114-67-7P, 2-Hydroxyethyl methacrylate-methyl methacrylate-octadecyl methacrylate graft copolymer 138114-68-8P 138232-63-0DP, carboxy-terminated 138232-63-0P, Dodecyl methacrylate-methyl methacrylate graft copolymer 138537-63-0P 142245-67-8DP, carboxy-terminated 142245-67-8P 142245-68-9P, Lauryl methacrylate-styrene graft copolymer 142245-69-0P, 2-Ethylhexyl methacrylate-styrene graft copolymer 142293-43-4P, 2-Ethylhexyl methacrylate-methyl methacrylate graft copolymer
(prepared for electrophotog. apparatus ~~cleansing~~ solution)
- IT 25639-21-8DP, Octadecyl methacrylate homopolymer, carboxy-terminated, ester with hydroxy-terminated methacrylates 112955-45-0P 112955-56-3P 114512-15-1P 137646-74-3DP, reaction product with acrylic chloride 139104-78-2P 139104-81-7P 139104-83-9P 139104-86-2P 139104-87-3P 139104-88-4P 139104-90-8P 139104-94-2P 139104-95-3P 139104-96-4P 139104-98-6P 139104-99-7P 139105-01-4P 139105-03-6P 139105-04-7P 139105-07-0P 139105-08-1P 139105-10-5P 139105-12-7P 141348-56-3P 141349-00-0P 141349-03-3P 141349-31-7P 141349-35-1P 141440-78-0P 142297-55-0P 151064-78-7P 165035-77-8P 165035-78-9P 165035-79-0P 165035-80-3P 165035-81-4P
(prepared for forming graft copolymer for electrophotog. apparatus ~~cleansing~~ solution)

L50 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1995:231058 HCAPLUS Full-text
 DOCUMENT NUMBER: 122:10969
 ORIGINAL REFERENCE NO.: 122:2407a,2410a

10/534,196

TITLE: Large-dimension emulsion polymer particles and their manufacture and use
 INVENTOR(S): Chiou, Shang Jaw; Li Sheng, Miao Hsun; Hook, John William, III; Stevens, Travis Edward
 PATENT ASSIGNEE(S): Rohm and Haas Co., USA
 SOURCE: Eur. Pat. Appl., 36 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 597567	A2	19940518	EP 1993-305385	19930708
			<--	
EP 597567	A3	19950315		
EP 597567	B1	19990818		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5369163	A	19941129	US 1992-975746	19921113
			<--	
CA 2093483	A1	19940514	CA 1993-2093483	19930406
			<--	
JP 06199914	A	19940719	JP 1993-106854	19930507
			<--	
JP 3248599	B2	20020121		
BR 9302021	A	19940517	BR 1993-2021	19930520
			<--	
AT 183518	T	19990915	AT 1993-305385	19930708
			<--	
ES 2137971	T3	20000101	ES 1993-305385	19930708
			<--	
SG 73370	A1	20000620	SG 1996-2383	19930708
			<--	
NO 9302523	A	19940516	NO 1993-2523	19930712
			<--	
IL 106312	A	19970930	IL 1993-106312	19930712
			<--	
HU 66123	A2	19940928	HU 1993-2009	19930713
			<--	
FI 9303196	A	19940514	FI 1993-3196	19930714
			<--	
AU 9342056	A	19940526	AU 1993-42056	19930719
			<--	
AU 670944	B2	19960808		
ZA 9305265	A	19940513	ZA 1993-5265	19930721
			<--	
RU 2133756	C1	19990727	RU 1993-51214	19931110
			<--	
CN 1089621	A	19940720	CN 1993-121231	19931113
			<--	
CN 1066157	C	20010523		
CN 1270176	A	20001018	CN 2000-100979	20000114
			<--	
PRIORITY APPLN. INFO.:			US 1992-975746	A 19921113
			<--	

ED Entered STN: 08 Dec 1994

AB Large-dimension particles with shapes varying from egg-like to nearly spherical are manufactured by emulsion-polymerization of ≥ 1 ethylenically

unsatd. monomer in the presence of a 0.5-50% a solubilized, amphiphilic, hydrophobic-hydrophilic-balanced, alkali- or acid-soluble resin as dispersant and optionally, an organic additive under such conditions that the amphiphilic stabilizer remains in solution and addition of more monomer in a controlled way. The particles are useful as reinforcing additives for coatings, moldings, potting compns., adhesives, and cementitious compns. Thus, an emulsion containing Bu acrylate (I), water, triethanolammonium dodecylbenzenesulfonate, Me methacrylate (II), and n-dodecanethiol was fed 1.5 h simultaneously with an aqueous solution containing tert-Bu hydroperoxide and (NH₄)₂S₂O₈, and an aqueous NaHSO₃ solution to an emulsion containing 1:1:1 (weight ratio) I-methacrylic acid-II copolymer, triethanolamine solubilizer, FeSO₄, and versene at 68° to give rod-shaped particles with diameter 0.8 μm and length 50-70 μm.

IT 35166-02-08, Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer (large-dimension emulsion polymer particles)

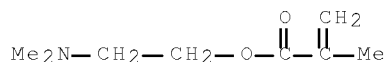
RN 35166-02-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

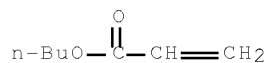
CMF C8 H15 N O2



CM 2

CRN 141-32-2

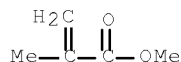
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08F002-24
ICS C09D157-00
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 42
IT ~~Dispersing agents~~
(amphiphilic acrylic polymers; large-dimension emulsion polymer particle manufacture)
IT 9003-49-0P, Poly(butyl acrylate) 9003-53-6P, Polystyrene
9010-88-2P, Ethyl acrylate-methyl methacrylate copolymer
25067-01-0DP, Butyl acrylate-vinyl acetate copolymer, hydrolyzed
25067-01-0P, Butyl acrylate-vinyl acetate copolymer 25067-63-4DP,
Methyl acrylate-vinyl acetate copolymer, hydrolyzed 25153-49-5P,
Ethyl acrylate-glycidyl methacrylate-methyl methacrylate copolymer
25190-97-0DP, Ethyl acrylate-vinyl acetate copolymer, hydrolyzed
25567-76-4P, Acrylonitrile-butyl acrylate copolymer 25767-47-9P,
Butyl acrylate-styrene copolymer 25852-37-3P, Butyl acrylate-methyl
methacrylate copolymer 25951-39-7P, Butyl acrylate-2-hydroxyethyl
methacrylate-methyl methacrylate copolymer 26353-42-4P, Butyl
acrylate-ethyl acrylate copolymer 29354-76-5P 31326-18-8P, Butyl
acrylate-ethyl acrylate-itaconic acid copolymer ~~35166-02-0P~~,
Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate
copolymer 36182-73-7P 39317-52-7P, Divinylbenzene-vinyltoluene
copolymer 55567-73-2P 56848-73-8P, Acrylamide-butyl
acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
67785-43-7P 87889-52-9P 159487-69-1P
(large-dimension emulsion polymer particles)

L50 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:580491 HCAPLUS Full-text

DOCUMENT NUMBER: 121:180491

ORIGINAL REFERENCE NO.: 121:32795a,32798a

TITLE: Preparation of aqueous polymer dispersions

INVENTOR(S): Namura, Ichiro; Minami, Kenji; Izumibayashi,
Masuji

PATENT ASSIGNEE(S): Nippon Catalytic Chem Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

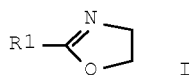
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 06145210	A	19940524	JP 1992-293469	19921030
			<--	
PRIORITY APPLN. INFO.:			JP 1992-293469	19921030
			<--	

ED Entered STN: 15 Oct 1994

GI



AB In preparation of the dispersions by emulsion or suspension polymerization of unsatd. monomers in aqueous media by using dispersion stabilizers, oxazoline copolymers obtained from oleophilic oxazoline derivs. (I; R1 = cyclohexyl, 2-cyclohexenyl, 3-cyclohexenyl) and hydrophilic oxazoline compds. are used as the dispersion stabilizers. Thus, polymerizing 386.4 parts styrene and 213.6 parts 2-ethylhexyl acrylate at 80° in an aqueous solution containing 36 parts block copolymer [prepared from 10 mol 2-methyl-2-oxazoline and 0.75 mol 2-(3'-cyclohexenyl)-2-oxazoline] in the presence of K2S2O8 gave a polymer dispersion. An aqueous composition containing the dispersion formed a coating with good adhesion to steel, glass, and PET plates and water resistance.

IT 157797-87-0P

(preparation of, oxazoline polymer dispersion stabilizers in, for toners)

RN 157797-87-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with diethenylbenzene, 2-(diethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene and sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

CCI IDS



D1-CH=CH₂

D1-SO₃H

● Na

CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS

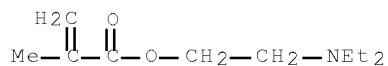


2 [D1-CH=CH₂]

CM 3

CRN 105-16-8

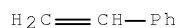
CMF C10 H19 N O2



CM 4

CRN 100-42-5

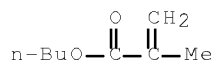
CMF C8 H8



CM 5

CRN 97-88-1

CMF C8 H14 O2



IC ICM C08F002-22

ICS C08F002-18

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42, 46

IT **Surfactants**

(oxazoline polymers, in manufacture of polymer aqueous dispersions, for water-resistant coatings)

IT 25767-47-9P, Butyl acrylate-styrene copolymer 157797-87-0P

(preparation of, oxazoline polymer dispersion stabilizers in, for toners)

L50 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:436303 HCAPLUS Full-text

DOCUMENT NUMBER: 121:36303

ORIGINAL REFERENCE NO.: 121:6730h,6731a

TITLE: Synthesis and surface activity of novel ABA type triblock cationic amphiphiles

AUTHOR(S): Oh, Jae Min; Lee, Hyung Jong; Shim, Hong Ku; Kwon, Sam

CORPORATE SOURCE: Dep. Chem., Korea Adv. Inst. Sci. Technol., Taejon, 305-701, S. Korea

SOURCE: Polymer Bulletin (Berlin, Germany) (1994), 32(2), 149-54
 CODEN: POBUDR; ISSN: 0170-0839
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 23 Jul 1994

AB Different amphiphilic triblock copolymers of Bu methacrylate (BMA) and 2-methacryloyloxyethyltrimethyl ammonium iodide were prepared by the reaction of precursor polymer and iodomethane. The precursor polymers were obtained by group-transfer polymerization (GTP) of BMA with 2-(dimethylamino)ethyl methacrylate (DMAEMA) using a difunctional initiator at room temperature. Their mol. weight and composition could be controlled by regulating the monomer to initiator ratio and the feed ratio of two monomers. From quant. quaternization of poly(DMAEMA) segments of precursor polymers by iodomethane, the target polymers were prepared. These amphiphilic triblock copolymers exhibited excellent surface activity and lowered the surface tension of their aqueous solns. The lowest surface tension (γ) value reached to 27.4 dyn/cm.

IT 115468-45-6P, Butyl methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer 156120-02-4P, Butyl methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer methyl iodide salt 830334-77-5P 836606-96-3P
 (triblock, preparation and characterization and quaternization of)

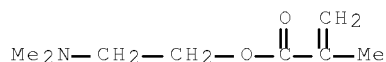
RN 115468-45-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block (CA INDEX NAME)

CM 1

CRN 2867-47-2

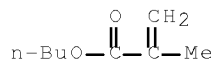
CMF C8 H15 N O2



CM 2

CRN 97-88-1

CMF C8 H14 O2



RN 156120-02-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block, compd. with iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4

CMF C H3 I

 $\text{H}_3\text{C}-\text{I}$

CM 2

CRN 115468-45-6

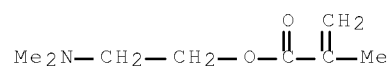
CMF (C8 H15 N O2 . C8 H14 O2)x

CCI PMS

CM 3

CRN 2867-47-2

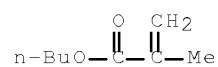
CMF C8 H15 N O2



CM 4

CRN 97-88-1

CMF C8 H14 O2



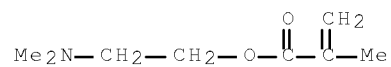
RN 830334-77-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, triblock (CA INDEX
 NAME)

CM 1

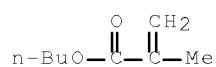
CRN 2867-47-2

CMF C8 H15 N O2



CM 2

CRN 97-88-1
CMF C8 H14 O2



RN 836606-96-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate, triblock, compd. with
iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4
CMF C H3 I

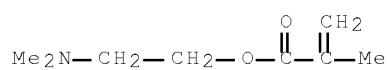


CM 2

CRN 830334-77-5
CMF (C8 H15 N O2 . C8 H14 O2)x
CCI PMS

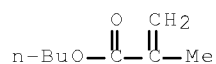
CM 3

CRN 2867-47-2
CMF C8 H15 N O2



CM 4

CRN 97-88-1
CMF C8 H14 O2



CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 36, 45

IT Surfactants
 (amphiphilic, Bu methacrylate-2-(dimethylamino)ethyl methacrylate
 triblock copolymer and its quaternized derivative)

IT 115468-45-6P, Butyl methacrylate-2-(dimethylamino)ethyl
 methacrylate block copolymer 156120-02-4P, Butyl
 methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer
 methyl iodide salt 830334-77-5P 836606-96-3P
 (triblock, preparation and characterization and quaternization of)

L50 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:203378 HCAPLUS Full-text

DOCUMENT NUMBER: 118:203378

ORIGINAL REFERENCE NO.: 118:34724h,34725a

TITLE: Electrically conductive coatings and coated
 fabrics

INVENTOR(S): Mitsutake, Tatsuo; Narisawa, Shizuo

PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

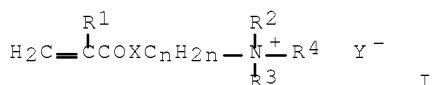
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 04309510	A	19921102	JP 1991-72839	19910405
			<--	
JP 3341084	B2	20021105		
PRIORITY APPLN. INFO.:			JP 1991-72839	19910405
			<--	

ED Entered STN: 14 May 1993

GI



AB Transparent title coatings, useful for improving properties of fabrics,
 comprise emulsions of copolymers with glass transition temperature (Tg) ≤ -15°
 composed of 1-50% I (R1 = H, Me; R2, R3 = C1-4 alkyl; R4 = H, C1-2 alkyl; X =
 O, NH; Y- = anion; n = 2-5) and 50-90% vinyl monomers from N-
 methylol(meth)acrylamide, N-methoxymethyl(meth)acrylamide, N-
 ethoxymethyl(meth)acrylamide, N-butoxymethyl(meth)acrylamide, and N-
 isobutoxymethyl(meth)acrylamide. Thus, polyester cloth coated with a
 composition of Bu acrylate-methacryloyloxyethyltrimethylammonium chloride-N-
 methylolacrylamide-styrene (68:20:2:10) copolymer with Tg -34° and 2-
 hydroxyethylcellulose (thickener) and dried at 120° showed elec. conductivity
 4.1 + 10⁷ Ω at 30% relative humidity and 3.2 + 10⁶ Ω at 60% relative
 humidity, pull-out strength (JIS L 1201) 3.5 kg/pile, and good wear
 resistance, handle, antiblocking property, and adhesion to plastics.

IT 147232-97-1P 147232-98-2P 147232-99-3P

10/534,196

(coatings, preparation of, elec. conductive, transparent, for fabrics)

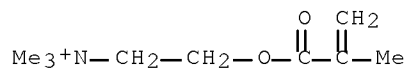
RN 147232-97-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-propenamide (CA INDEX NAME)

CM 1

CRN 5039-78-1

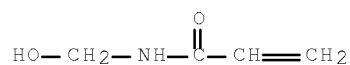
CMF C9 H18 N O2 . Cl



CM 2

CRN 924-42-5

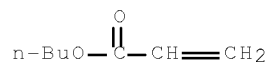
CMF C4 H7 N O2



CM 3

CRN 141-32-2

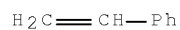
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



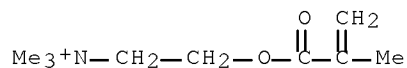
RN 147232-98-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, polymer with butyl 2-propenoate,
N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 5039-78-1

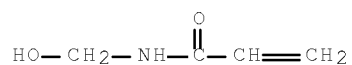
CMF C9 H18 N O2 . Cl



CM 2

CRN 924-42-5

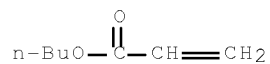
CMF C4 H7 N O2



CM 3

CRN 141-32-2

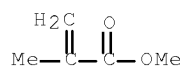
CMF C7 H12 O2



CM 4

CRN 80-62-6

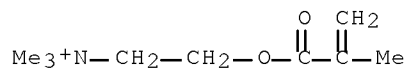
CMF C5 H8 O2



RN 147232-99-3 HCAPLUS
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-,
 chloride (1:1), polymer with butyl 2-propenoate and ethenylbenzene
 (CA INDEX NAME)

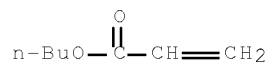
CM 1

CRN 5039-78-1
 CMF C9 H18 N O2 . Cl



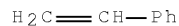
CM 2

CRN 141-32-2
 CMF C7 H12 O2



CM 3

CRN 100-42-5
 CMF C8 H8



IC ICM C08F220-34
 ICS C08F220-60; C08F246-00; C08L033-14; C08L033-26; D01F001-09;
 D01F006-36
 ICA C07C219-08; C07C233-38
 CC 76-2 (Electric Phenomena)
 Section cross-reference(s): 35, 40, 42
 ST fabric coating elec conductive transparent;
 acryloyloxyalkyltrialkylammonium salt copolymer conductive coating
 IT Textiles
 (coatings for, elec. conductive, transparent)
 IT Polyester fibers, miscellaneous
 (fabrics, coatings for, elec. conductive, transparent)

IT Coating materials
 (elec. conductive, transparent, containing copolymers of quaternary ammonium-containing acrylate esters, for fabrics)

IT 147212-15-5P 147232-97-1P 147232-98-2P
 147232-99-3P
 (coatings, preparation of, elec. conductive, transparent, for fabrics)

L50 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:39498 HCAPLUS Full-text

DOCUMENT NUMBER: 118:39498

ORIGINAL REFERENCE NO.: 118:7217a,7220a

TITLE: Emulsion copolymerization of small-particle size, high-molecular-weight poly(alkylaminoalkyl methacrylate-co-alkyl methacrylate) latexes

AUTHOR(S): Vanderhoff, J. W.; Hong, S. H.; Hu, M. R.; Park, J. M.; Segall, I.; Wang, S.; Yue, H. J.

CORPORATE SOURCE: Emulsion Polym. Inst., Lehigh Univ., Bethlehem, PA, 18015, USA

SOURCE: ACS Symposium Series (1992), 492 (Polym. Latexes), 216-33

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 03 Feb 1993

AB The compositionally homogeneous viscoelastic title copolymers were prepared by semicontinuous emulsion polymerization. The results were evaluated in terms of the expected proportionalities of the rate of polymerization to the number of polymer particles and the mol. weight to the number of particles relative to the rate of radical generation. The rates of polymerization were determined gravimetrically or by gas chromatog. The average particle sizes were inordinately small (18-86 nm), and the mol. wts. were typically $\geq 10^6$. The small particle sizes were first attributed to the high emulsifier concentration and excellent stability of the latexes, and later to the failure of the latex particles containing only 8-11 polymer mols. to grow further. The high mol. wts. were attributed to the large number of particles. The copolymer composition, mol. weight, solubility, and viscoelastic properties in solution were determined, and the effects of the type of catalyst (water- or oil-soluble), polymerization temperature, emulsifier type and concentration, and monomer feed were studied. Anal. of the homogeneity of the copolymers by ^{13}C -NMR and FTIR spectroscopy, DSC, and TEM gave conflicting results.

IT ~~129698-94-8P~~, Diethylaminoethyl methacrylate-isobutyl methacrylate copolymer

(preparation of, by emulsion polymerization, particle size and mol. weight in relation to)

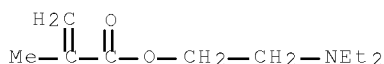
RN 129698-94-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with 2-methylpropyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 105-16-8

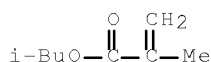
CMF C10 H19 N O2



CM 2

CRN 97-86-9

CMF C8 H14 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

IT Emulsifying agents

(for semicontinuous emulsion polymerization of alkylaminoalkyl methacrylates with alkyl methacrylates)

IT 25119-82-8P, Diethylaminoethyl methacrylate polymer 26716-20-1P
 27027-16-3P, Diethylaminoethyl methacrylate-methyl methacrylate
 copolymer 40008-96-6P, tert-Butylaminoethyl methacrylate-isobutyl
 methacrylate copolymer 53489-10-4P 90667-56-4P
 129698-94-8P, Diethylaminoethyl methacrylate-isobutyl
 methacrylate copolymer

(preparation of, by emulsion polymerization, particle size and mol. weight
 in relation to)

L50 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:48849 HCAPLUS Full-text

DOCUMENT NUMBER: 116:48849

ORIGINAL REFERENCE NO.: 116:8283a,8286a

TITLE: Charge-controlled positively charging toner
 containing vinyl resin particle on its surface

INVENTOR(S): Maruta, Masayuki; Kida, Katsuaki

PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 03132766	A	19910606	JP 1989-272059	19891019
			<--	
PRIORITY APPLN. INFO.:			JP 1989-272059	19891019
			<--	

ED Entered STN: 08 Feb 1992

AB The title toner is prepared by addition, to the surface of a colored particle comprising a binder resin, a coloring agent, and a charge-controlling agent, of a resin particle (average particle size 0.02-0.1 μm) which is prepared by emulsion polymerization of ≥ 1 α, β -unsatd. vinyl monomers in an aqueous medium in the presence of a higher fatty acid alkali metal salt surfactant and a polymerization initiator having CO₂H (salt) and the charge of the colored particle is higher than that of the toner after the addition The toner shows good flow, chargeability, and durability. Thus, Me methacrylate and styrene

were polymerized in an aqueous medium containing Na stearate and 4,4'-azobis(4-cyanovaleric acid) and spray-dried to give a resin particle. The particle was mixed with a colored particle prepared from Bu methacrylate-dimethylaminoethyl methacrylate-styrene copolymer, Bu methacrylate-styrene copolymer, polypropylene wax, and C black to give a toner, which was mixed with a ferrite carrier to give a developer.

IT 81094-87-3P

(preparation of, charge-controlled binder, for electrophotog. developer toner, surface additive for, emulsion-polymerized vinyl resin as)

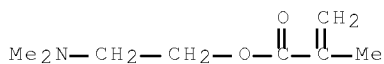
RN 81094-87-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate and ethenylbenzene (CA
INDEX NAME)

CM 1

CRN 2867-47-2

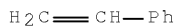
CMF C8 H15 N O2



CM 2

CRN 100-42-5

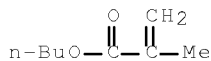
CMF C8 H8



CM 3

CRN 97-88-1

CMF C8 H14 O2



IC ICM G03G009-08

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 35

IT Surfactants

(alkali metal higher fatty acid salt, for emulsion polymerization, for
vinyl resin surface additive, for electrophotog. developer toner)

IT 81094-87-3P

(preparation of, charge-controlled binder, for electrophotog. developer toner, surface additive for, emulsion-polymerized vinyl resin as)

L50 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:45157 HCAPLUS Full-text

DOCUMENT NUMBER: 114:45157

ORIGINAL REFERENCE NO.: 114:7841a,7844a

TITLE: Emulsion polymerization of vinyl monomers

INVENTOR(S): Kawakami, Susumu; Sakai, Yutaka; Kariya, Toshe;
Soda, Yoshihiro; Hata, Hironori

PATENT ASSIGNEE(S): Natoco Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
JP 02178301	A	19900711	JP 1988-334354	19881228
			<--	
JP 2734046	B2	19980330		
PRIORITY APPLN. INFO.:			JP 1988-334354	19881228
			<--	

ED Entered STN: 09 Feb 1991

AB Monomers containing silyl-reactive vinyl monomers are emulsion-polymerized in an aqueous solution of water-soluble hydrolyzable silyl-containing synthetic resins. The polymers are crosslinked by the reactive emulsifiers to form alkali-, solvent-, and water-resistant films with good adhesion when applied to substrates. Thus, Et acrylate, Me methacrylate, styrene, and vinyltrimethoxysilane were emulsion-polymerized at 80° in the presence of NH3-neutralized Bu acrylate-methacrylic acid-γ-methacryloyloxypropyltrimethoxysilane-Me methacrylate-styrene copolymer (emulsifier) and K2S2O8 to give a polymer emulsion with solids 50% and viscosity 250 cP. The polymer showed Tg 46° and min. film-forming temperature (MFT) 7°, formed an acetone-, alkali-, and water-resistant film on glass, and showed good adhesion when applied to a phosphate-treated steel sheet while a Bu acrylate-Me methacrylate-γ-methacryloyloxypropyltrimethoxysilane-styrene copolymer prepared in the presence of Eleminol JS-2 (polymerizable surfactant) showed Tg 38° and MFT 37° and formed a film which whitened by H2O or Me2CO.

IT 131406-17-2DP, polymers with silyl reactive group-containing polymers

(preparation of, coatings, alkali- and solvent- and water-resistant)

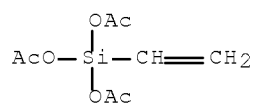
RN 131406-17-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, ethenylsilyldiylne triacetate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4130-08-9

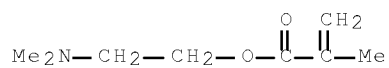
CMF C8 H12 O6 Si



CM 2

CRN 2867-47-2

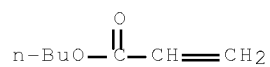
CMF C8 H15 N O2



CM 3

CRN 141-32-2

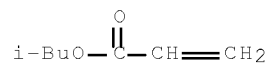
CMF C7 H12 O2



CM 4

CRN 106-63-8

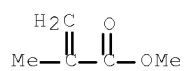
CMF C7 H12 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08F002-22
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 35
 IT ~~Emulsifying agents~~
 (reactive, water-soluble silyl-reactive polymers, for emulsion
 polymerization
 of vinyl monomers)
 IT 67783-85-1DP, polymers with silyl-containing polymer emulsifiers
 127475-66-5DP, polymers with silyl reactive group-containing polymers
~~131406-17-2DP~~, polymers with silyl reactive group-containing
 polymers 131431-00-0DP, polymers with silyl-containing polymer
 emulsifiers
 (preparation of, coatings, alkali- and solvent- and water-resistant)

L50 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:140052 HCAPLUS Full-text

DOCUMENT NUMBER: 112:140052

ORIGINAL REFERENCE NO.: 112:23689a,23692a

TITLE: Preparation of ionic acrylic block polymers as
 dispersants for pigments

INVENTOR(S): West, Michael Wendell Johnson

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Braz. Pedido PI, 21 pp.

CODEN: BPXXDX

DOCUMENT TYPE: Patent

LANGUAGE: Portuguese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
BR 8800898	A	19890926	BR 1988-898	19880302
			<--	
AU 8812016	A	19890824	AU 1988-12016	19880222
			<--	
AU 604844	B2	19910103		
PRIORITY APPLN. INFO.:			BR 1988-898	19880302
			<--	

ED Entered STN: 13 Apr 1990

AB Title copolymers comprise (alkoxy)alkyl (meth)acrylate blocks [number-average
 mol. weight (Mn) 200-10,000] bearing the pendant ionic groups AR₁mX [A = N, P,
 S; R₁ = (alkoxy)alkyl, (substituted) Ph; X = halogen, organic acid base salt
 group; m = 3 if A = N or P, 2 if A = S] and (alkoxy)alkyl (meth)acrylate
 blocks (Mn 500-100,000) without pendant groups. Me methacrylate-2-
 (dimethylamino)ethyl methacrylate block copolymer benzyl chloride salt was an
 effective dispersant for pigments.

IT ~~125975-91-9P 125975-92-0P 125975-95-3P~~
~~125975-97-5P~~

(dispersants for pigments, manufacture of)

RN 125975-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-ethyl-2-propenoate and methyl
 2-methyl-2-propenoate, block, compd. with (bromomethyl)benzene (9CI)
 (CA INDEX NAME)

CM 1

CRN 100-39-0

CMF C7 H7 Br



CM 2

CRN 125975-90-8

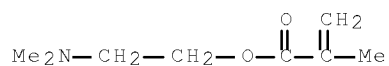
CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x

CCI PMS

CM 3

CRN 2867-47-2

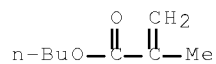
CMF C8 H15 N O2



CM 4

CRN 97-88-1

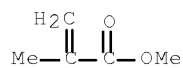
CMF C8 H14 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



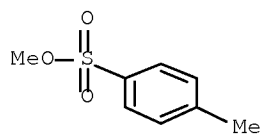
RN 125975-92-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
 2-methyl-2-propenoate, block, compd. with methyl
 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

10/534,196

CRN 80-48-8
CMF C8 H10 O3 S

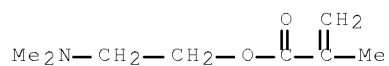


CM 2

CRN 125975-90-8
CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2) x
CCI PMS

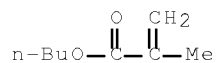
CM 3

CRN 2867-47-2
CMF C8 H15 N O2



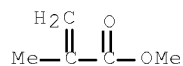
CM 4

CRN 97-88-1
CMF C8 H14 O2



CM 5

CRN 80-62-6
CMF C5 H8 O2



10/534,196

RN 125975-95-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
 2-methyl-2-propenoate, block, compd. with iodomethane (9CI) (CA INDEX
 NAME)

CM 1

CRN 74-88-4

CMF C H3 I

H₃C—I

CM 2

CRN 125975-90-8

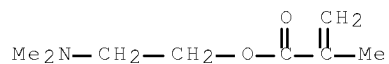
CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x

CCI PMS

CM 3

CRN 2867-47-2

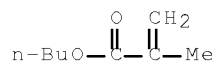
CMF C8 H15 N O2



CM 4

CRN 97-88-1

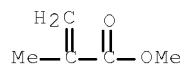
CMF C8 H14 O2



CM 5

CRN 80-62-6

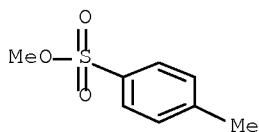
CMF C5 H8 O2



RN 125975-97-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block, compd. with
 methyl 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 80-48-8
 CMF C8 H10 O3 S

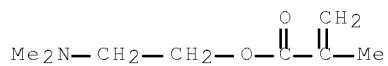


CM 2

CRN 115468-45-6
 CMF (C8 H15 N O2 . C8 H14 O2)x
 CCI PMS

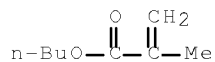
CM 3

CRN 2867-47-2
 CMF C8 H15 N O2



CM 4

CRN 97-88-1
 CMF C8 H14 O2



IC ICM C08F293-00
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 42, 46
 IT Dispersing agents

(acrylic block polymer quaternary ammonium derivs., for pigments)

IT ~~125975-91-9P~~ ~~125975-92-0P~~ 125975-94-2P~~125975-95-3P~~ 125975-96-4P ~~125975-97-5P~~

(dispersants for pigments, manufacture of)

L50 ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1989:39568 HCAPLUS Full-text

DOCUMENT NUMBER: 110:39568

ORIGINAL REFERENCE NO.: 110:6613a,6616a

TITLE: Block copolymer dispersants containing ionic moieties

INVENTOR(S): West, Michael W. J.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 4755563	A	19880705	US 1986-947319	19861229
			<--	
CA 1303267	C	19920609	CA 1988-559227	19880218
			<--	
EP 329873	A1	19890830	EP 1988-301552	19880223
			<--	
EP 329873	B1	19920930		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
ZA 8801253	A	19891025	ZA 1988-1253	19880223
			<--	
AT 81139	T	19921015	AT 1988-301552	19880223
			<--	
ES 2035264	T3	19930416	ES 1988-301552	19880223
			<--	
JP 01229014	A	19890912	JP 1988-47677	19880302
			<--	
PRIORITY APPLN. INFO.:			US 1986-947319	19861229
			<--	
			EP 1988-301552	A 19880223
			<--	

ED Entered STN: 04 Feb 1989

AB The title dispersants which do not require salt forming counterions with affinity to pigments comprise a copolymer of 0.1-50% cationic ammonium, phosphonium, or sulfonium group-containing ethylenically unsatd. monomer blocks (mol weight 200-10,000) and 50-99.9% blocks (mol weight 500-100,000) of CH₂:CHCO₂R and CH₂:CCH₃CO₂R (R = C₁-20 alkyl or C₁-20 alkyl ether), prepared by group-transfer polymerization. Thus, polymerizing 91.2 g Me methacrylate and 28.9 g N,N-dimethylaminoethyl methacrylate in 3 mL THF in 2 feed streams 20 min apart in the presence of 0.350 mL catalyst containing 1-methoxy-1-trimethylsiloxy-2-methylpropene and tetrabutylammonium 3-chlorobenzoate gave a block copolymer of which 30.69 g (in THF) was alkylated with 3.0 g benzyl chloride and refluxed in 50.5 g iso-PrOH for 3 h, then 5 h to give a block copolymer with tertiary amine content 0.31 mM/g. The above block copolymer had dispersion rating (1 = deflocculated, 4 = flocculated) 1 in MIBK for various standard phthalocyanine pigments.

IT ~~24938-16-7DP~~, Butyl methacrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer, reaction product with alkylating agent

(preparation of, for pigment dispersing agent)

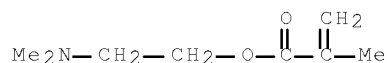
RN 24938-16-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

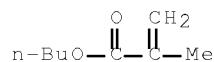
CMF C8 H15 N O2



CM 2

CRN 97-88-1

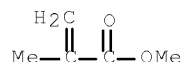
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08F293-00

INCL 525287000

CC 35-7 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

IT Dispersing agents

(ammonium or sulfonium or phosphonium group-containing block
copolymers, manufacture of, for pigments)

IT 74-88-4DP, Iodomethane, reaction product with dimethylaminoethyl
methacrylate block copolymer 80-48-8DP, Methyl p-toluenesulfonate,
reaction product with dimethylaminoethyl methacrylate block copolymer
100-39-0DP, Benzyl bromide, reaction product with dimethylaminoethyl
methacrylate block copolymer 24938-16-7DP, Butyl
methacrylate-dimethylaminoethyl methacrylate-methyl methacrylate
copolymer, reaction product with alkylating agent 111320-26-4DP,
reaction products with benzyl chloride 115489-10-6DP, reaction

product with benzylbromide

(preparation of, for pigment dispersing agent)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1988:511101 HCAPLUS Full-text

DOCUMENT NUMBER: 109:111101

ORIGINAL REFERENCE NO.: 109:18531a,18534a

TITLE: Vinyl polymers manufactured by suspension
polymerization

INVENTOR(S): Kumagai, Yugo; Moribe, Isamu; Higashida, Osamu

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 63068601	A	19880328	JP 1986-211850	19860909

<--

PRIORITY APPLN. INFO.: JP 1986-211850 19860909

<--

ED Entered STN: 01 Oct 1988

AB Hydroxy and/or imide group-containing vinyl monomers are dispersed in water containing 0.01-0.2% (based on monomers) poly(vinyl alc.) (I) and polymerized with addition >0.2% (total amount, based on the monomers) I after reaching the polymerization temperature Adding of all of I at the beginning of polymerization gives polymers having high content of fines that clog filters. Thus, 75:192:30:3 (monomer feed ratio) 2-hydroxypropyl methacrylate-styrene-Bu acrylate-di-Bu maleate copolymer was prepared

IT 113596-54-6P

(manufacture of, with multistage addition of poly(vinyl alc.) dispersing agents)

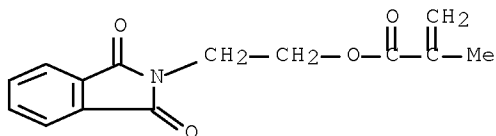
RN 113596-54-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl 2-methyl-2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

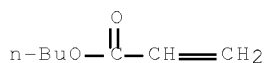
CRN 18791-05-4

CMF C14 H13 N O4



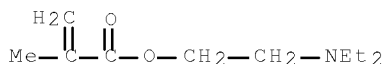
CM 2

CRN 141-32-2
CMF C7 H12 O2



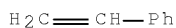
CM 3

CRN 105-16-8
CMF C10 H19 N O2



CM 4

CRN 100-42-5
CMF C8 H8



IC ICM C08F002-20
CC 35-4 (Chemistry of Synthetic High Polymers)
IT Dispersing agents
(poly(vinyl alc.), multistage addition of, in vinyl polymerization)
IT 106646-40-6P 113596-54-6P 116197-23-0P 116197-24-1P
(manufacture of, with multistage addition of poly(vinyl alc.) dispersing agents)

L50 ANSWER 47 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1984:192548 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 100:192548
ORIGINAL REFERENCE NO.: 100:29291a, 29294a
TITLE: Sterically stabilized aqueous polymer dispersions
INVENTOR(S): Davies, Stephen Parry; Thompson, Morice William
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
SOURCE: Brit. UK Pat. Appl., 18 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

GB 2120261	A	19831130	GB 1983-12212	19830504
			<--	
GB 2120261	B	19851030		
EP 95263	A2	19831130	EP 1983-302507	19830504
			<--	
EP 95263	A3	19840229		
EP 95263	B1	19870722		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 28467	T	19870815	AT 1983-302507	19830504
			<--	
IN 159469	A1	19870523	IN 1983-DE300	19830510
			<--	
AU 8314502	A	19831124	AU 1983-14502	19830512
			<--	
AU 563454	B2	19870709		
US 4539362	A	19850903	US 1983-494886	19830516
			<--	
DK 8302221	A	19831121	DK 1983-2221	19830518
			<--	
ZA 8303592	A	19840229	ZA 1983-3592	19830518
			<--	
FI 8301774	A	19831121	FI 1983-1774	19830519
			<--	
FI 72528	B	19870227		
FI 72528	C	19870608		
NO 8301777	A	19831121	NO 1983-1777	19830519
			<--	
BR 8302643	A	19840117	BR 1983-2643	19830519
			<--	
CA 1203338	A1	19860415	CA 1983-428543	19830519
			<--	
JP 58213002	A	19831210	JP 1983-87821	19830520
			<--	
JP 04025282	B	19920430		
PRIORITY APPLN. INFO.:			GB 1982-14675	A 19820520
			<--	
			EP 1983-302507	A 19830504
			<--	

OTHER SOURCE(S): MARPAT 100:192548

ED Entered STN: 08 Jun 1984

AB Stable aqueous ethylenically unsatd. polymer dispersions are prepared by emulsifying the monomers in water and polymerizing in the presence of a nonionizable free-radical organic azo catalyst and an amphipathic steric dispersion stabilizer which is a block or graft copolymer. Thus, 1.38 g polyethylene glycol monomethyl ether monomethacrylate [26915-72-0] (mol. weight 2000) was dissolved in 80 g water and separated into equal portions. 4,4'-Azobis(cyanovaleric acid) bis(diethanolamide) [88190-85-6] (0.138 g) was dissolved in 1 portion, and 6 g Me methacrylate was suspended in the other portion. The 2 portions were mixed together ultrasonically at 50° for 4.5 h to give a monodisperse PMMA [9011-14-7] latex (particle size 330 nm) which did not visibly flocculate on addition of 10% aqueous CaCl₂ solution

IT ~~35166-02-0P~~

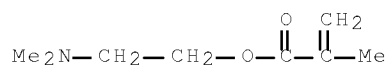
(dispersions, manufacture of, polymerization catalysts and stabilizers in)

RN 35166-02-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

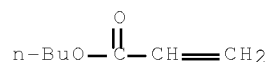
CM 1

CRN 2867-47-2
CMF C8 H15 N O2



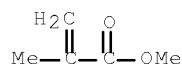
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC C08F004-04; C08F002-22
CC 35-4 (Chemistry of Synthetic High Polymers)
IT Dispersing agents
(for acrylic polymers in water)
IT 9003-20-7P 9003-53-6P 9011-14-7P 25852-37-3P 35166-02-0P
65572-63-6P 78228-25-8P 80044-51-5P 89678-92-2P
(dispersions, manufacture of, polymerization catalysts and stabilizers in)

L50 ANSWER 48 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:472278 HCAPLUS Full-text
DOCUMENT NUMBER: 99:72278
ORIGINAL REFERENCE NO.: 99:11221a,11224a
TITLE: Thermosetting cationic acrylic latex containing
blocked isocyanates
INVENTOR(S): Das, Suryya Kumar; Kania, Charles Martin
PATENT ASSIGNEE(S): PPG Industries, Inc. , USA
SOURCE: Fr. Demande, 23 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2513647	A1	19830401	FR 1982-16144	19820924
			<--	
FR 2513647	B1	19860411		
US 4395444	A	19830726	US 1981-305566	19810925
			<--	
CA 1192328	A1	19850820	CA 1982-410468	19820831
			<--	
JP 58067764	A	19830422	JP 1982-165939	19820922
			<--	
JP 62040386	B	19870827		
DE 3235044	A1	19830428	DE 1982-3235044	19820922
			<--	
DE 3235044	C2	19850103		
PRIORITY APPLN. INFO.:			US 1981-305566	A 19810925
			<--	

ED Entered STN: 12 May 1984

AB The title coatings, with good adhesion and efficient crosslinking, contain acrylic polymer latexes prepared by emulsion polymerization in acidic media in the presence of sulfonates of cationic surfactants. Thus, adding 90% of a mixture of Bu acrylate 282, Me methacrylate 294, and hydroxypropyl methacrylate 24 parts at 150 mL/h to FeCl₃ 0.3, H₂O₂ 5.4, C₁₂H₂₅NH₂ 4.0, MeSO₃H 6.6, H₂O 827 parts and the remaining 10% monomers stirred at 72°, adding after 1 h 2-(dimethylamino)ethyl methacrylate 7.5, MeSO₃H 6.6, and H₂O 106.8 parts in 3 equal portions at 1-h intervals, and stirring 1 h at 72-75° gave a copolymer [85931-84-6] latex with solids content 40.1%, pH 2.9, and viscosity 44.5 cP at 22°. A mixture of this latex 55.6, TiO₂ pigment paste 42.7, blocked triisocyanate 55.6, Bu₂Sn dilaurate 0.7, Bu(OCH₂CH₂)₂OH 5.9, and H₂O 15 parts was coated on Bonderized Al and baked 42 s at 216°, 50 s at 224°, or 55 s at 232° to give a film with MEK resistance 4, 48, and 84 double rubs, resp.

IT 85931-84-6P 86166-88-3P

(latex coatings, manufacture of, by emulsion polymerization)

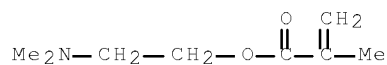
RN 85931-84-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

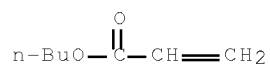
CMF C8 H15 N O2



CM 2

CRN 141-32-2

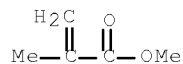
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



CM 4

CRN 27813-02-1

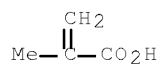
CMF C7 H12 O3

CCI IDS

CM 5

CRN 79-41-4

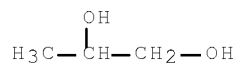
CMF C4 H6 O2



CM 6

CRN 57-55-6

CMF C3 H8 O2

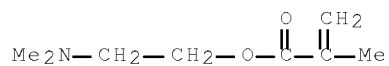


RN 86166-88-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 1,2-propanediol mono(2-methyl-2-propenoate) and 2-propenoic acid (9CI) (CA INDEX NAME)

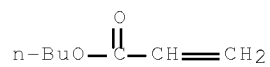
CM 1

CRN 2867-47-2
CMF C8 H15 N O2



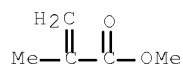
CM 2

CRN 141-32-2
CMF C7 H12 O2



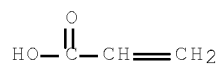
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2



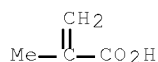
CM 5

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

CM 6

CRN 79-41-4

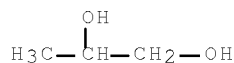
CMF C4 H6 O2



CM 7

CRN 57-55-6

CMF C3 H8 O2



IC C08L033-00; C08L025-14; C08F002-28; C08F212-08; C08F220-02;
C08K005-29; C09D003-80
CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT ~~Surfactants~~
(amine methanesulfonates, for emulsion polymerization of acrylic compds.)
IT ~~85931-84-6F~~ 86166-86-1P ~~86166-88-3F~~ 86166-89-4P
(latex coatings, manufacture of, by emulsion polymerization)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L50 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1969:439498 HCAPLUS Full-text

DOCUMENT NUMBER: 71:39498

ORIGINAL REFERENCE NO.: 71:7307a, 7310a

TITLE: Surface-active copolymers forming in emulsion
polymerization, and their role in the process
AUTHOR(S): Eliseeva, V. I.; Kozlov, L. V.; Drezel's, S. S.

CORPORATE SOURCE: Inst. Fiz. Khim., Moscow, USSR

SOURCE: Doklady Akademii Nauk SSSR (1969),
186(1), 128-31 Phys Chem
CODEN: DANKAS; ISSN: 0002-3264

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ED Entered STN: 12 May 1984

AB The stabilization factors for latex of polymers formed by copolymn. of
BuO₂CCMe:CH₂ or CH₂:CHOAc with Me₂NCH₂CH₂O₂CCMe:CH₂ were studied. The
copolymers were prepared with persulfate initiator in aqueous phase without
an emulsifier under Ar. The stable latexes were formed only in acid media and
a typical electron photomicrograph of such product was displayed. The kinetic
data on the progress of polymer formation at pH 5.4-5.8 showed that the
surface-active materials of low mol. weight formed in the early stages are
indeed polymeric radicals which increase in size with further chain growth,
reaching large dimensions and no longer removable by electrodialysis. The
kinetic data also showed that the copolymn. in these cases was a 2-step or 2-
phase process in which the initial stages produce a water-soluble predominant
component in the growing chain, while the latter stages proceed with larger

contribution by the other comonomer. The last stage of the reaction results in new particle formation without consumption of the already existing surface-active particles. The reaction thus starts with formation of polymer radicals enriched by water-soluble component; part of these after reaching a certain size precipitate from solution and aggregate into particles which solubilize both monomers owing to their diphilic nature. Hence the process proceeds in the monomer phase to form the high-mol.-weight copolymer. The surface of the latter is stabilized by sorption of the water-soluble surface-active radicals and by its own diphilic nature.

IT 26658-83-3P

(preparation of, kinetics of)

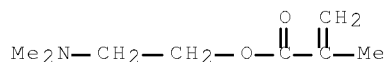
RN 26658-83-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

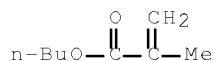
CMF C8 H15 N O2



CM 2

CRN 97-88-1

CMF C8 H14 O2



CC 35 (Synthetic High Polymers)

IT Surfactants, preparation

(in polymerization of butyl methacrylate with (dimethylamino)ethyl methacrylate)

IT 26658-83-3P

(preparation of, kinetics of)

=> d his nofile

(FILE 'HOME' ENTERED AT 08:33:24 ON 24 APR 2009)

FILE 'HCAPLUS' ENTERED AT 08:33:35 ON 24 APR 2009

L1 2 SEA SPE=ON ABB=ON PLU=ON US20060217285/PN
SEL RN

FILE 'REGISTRY' ENTERED AT 08:33:48 ON 24 APR 2009

L2 6 SEA SPE=ON ABB=ON PLU=ON (9003-49-0/BI OR 281198-01-4/BI
OR 33114-26-0/BI OR 363619-87-8/BI OR 688811-07-6/BI OR
691355-68-7/BI)

E DMAA/CN

L3 5 SEA SPE=ON ABB=ON PLU=ON DMAA/CN

E 2-(DIMETHYLAMINO)ETHYL ACRYLATE/CN

L4 1 SEA SPE=ON ABB=ON PLU=ON "2-(DIMETHYLAMINO)ETHYL
ACRYLATE"/CN

L5 STR

L6 50 SEA SSS SAM L5

L7 5 SEA SPE=ON ABB=ON PLU=ON L2 NOT 1/NC

L8 1 SEA SPE=ON ABB=ON PLU=ON L7 NOT S/ELS

E (C8 H16 N O2 . C H3 O4 S)X/MF

L9 2 SEA SPE=ON ABB=ON PLU=ON "(C8 H16 N O2 . C H3 O4
S)X"/MF

L10 4 SEA SPE=ON ABB=ON PLU=ON L7 NOT L9

FILE 'HCAPLUS' ENTERED AT 08:39:51 ON 24 APR 2009

L11 17 SEA SPE=ON ABB=ON PLU=ON L10

FILE 'REGISTRY' ENTERED AT 08:40:35 ON 24 APR 2009

L12 52294 SEA SPE=ON ABB=ON PLU=ON 141-32-2/CRN

L13 20368 SEA SSS FUL L5

L14 5 SEA SPE=ON ABB=ON PLU=ON L13 AND L2

L15 STR

L16 50 SEA SUB=L13 SSS SAM L15

L17 3984 SEA SUB=L13 SSS FUL L15

SAV PEZ196/A L13

SAV L17 PEZ196A/A

FILE 'HCAPLUS' ENTERED AT 08:57:17 ON 24 APR 2009

L18 4249 SEA SPE=ON ABB=ON PLU=ON L17

L19 QUE SPE=ON ABB=ON PLU=ON FABRIC? OR TEXTIL? OR FIBER?
OR FIBRE? OR FIBROUS?

L20 1618 SEA SPE=ON ABB=ON PLU=ON L18(L)PREP/RL

L21 114 SEA SPE=ON ABB=ON PLU=ON L20 AND L19

L22 1 SEA SPE=ON ABB=ON PLU=ON L21 AND L1

E SURFACTANTS/CT

L23 271672 SEA SPE=ON ABB=ON PLU=ON SURFACTANTS+PFT,NT/CT

L24 245 SEA SPE=ON ABB=ON PLU=ON L20 AND L23

L25 QUE SPE=ON ABB=ON PLU=ON (BLOCK? OR GRAFT? OR STAR? OR
BRANCH?) (5A)COPOLYMER?

L26 17 SEA SPE=ON ABB=ON PLU=ON L21 AND L25

L27 75 SEA SPE=ON ABB=ON PLU=ON L24 AND L25

L28 1 SEA SPE=ON ABB=ON PLU=ON L27 AND ZWITTERION?

L29 QUE SPE=ON ABB=ON PLU=ON ANTIWRINK? OR CREASEPROOF? OR
CREASE PROOF? OR LAUNDER? OR CLEANSING? OR (HAIR? OR
SKIN) (3A) (TREAT? OR PROTECT?)

L30 2 SEA SPE=ON ABB=ON PLU=ON L27 AND L29

10/534,196

L31 3 SEA SPE=ON ABB=ON PLU=ON L24 AND L29
 L32 13 SEA SPE=ON ABB=ON PLU=ON L20 AND L29
 L33 29 SEA SPE=ON ABB=ON PLU=ON L26 OR L28 OR (L30 OR L31 OR
 L32)
 L34 2 SEA SPE=ON ABB=ON PLU=ON L33 AND L1
 L35 13 SEA SPE=ON ABB=ON PLU=ON L33 AND (1840-2002)/PRY,AY,PY
 L36 10 SEA SPE=ON ABB=ON PLU=ON L21 AND POLYMER?/SC,SX
 L37 37 SEA SPE=ON ABB=ON PLU=ON L24 AND POLYMER?/SC,SX
 L38 46 SEA SPE=ON ABB=ON PLU=ON L36 OR L37
 L39 36 SEA SPE=ON ABB=ON PLU=ON L38 AND (1840-2002)/PRY,AY,PY

FILE 'REGISTRY' ENTERED AT 09:11:04 ON 24 APR 2009

E SULFOPROPYL METHYLAMMONIUM ETHYL METHACRYLATE/CN

L40 1 SEA SPE=ON ABB=ON PLU=ON "SULFOPROPYL METHACRYLATE-ETHYL
 METHACRYLATE-HYDROXYETHYL METHACRYLATE-ETHYL ACRYLATE
 COPOLYMER"/CN

L41 1 SEA SPE=ON ABB=ON PLU=ON 3637-26-1/RN
 L42 260 SEA SPE=ON ABB=ON PLU=ON 3637-26-1/CRN

FILE 'HCAPLUS' ENTERED AT 09:16:37 ON 24 APR 2009

L43 96 SEA SPE=ON ABB=ON PLU=ON L41
 L44 299 SEA SPE=ON ABB=ON PLU=ON L42
 L45 0 SEA SPE=ON ABB=ON PLU=ON (L43 OR L44) AND L39
 L46 60 SEA SPE=ON ABB=ON PLU=ON (L43 OR L44) AND L18
 L47 5 SEA SPE=ON ABB=ON PLU=ON L46 AND L19
 L48 2 SEA SPE=ON ABB=ON PLU=ON L46 AND L29
 L49 2 SEA SPE=ON ABB=ON PLU=ON (L47 OR L48) AND (1840-2002)/PR
 Y,AY,PY
 L50 49 SEA SPE=ON ABB=ON PLU=ON L35 OR L39 OR L45 OR